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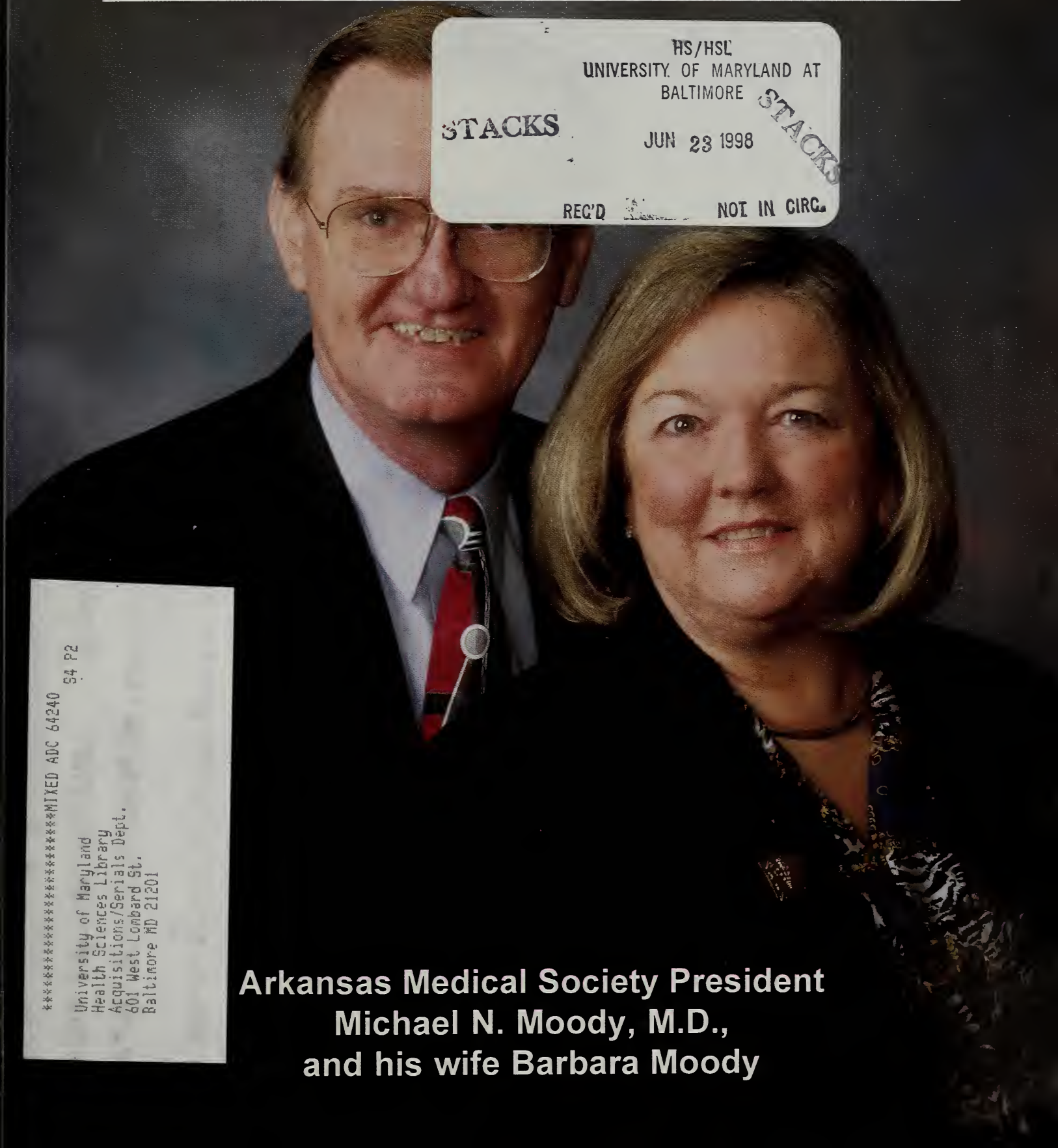
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THE JOURNAL OF THE ARKANSAS MEDICAL SOCIETY

Volume 95 Number 1

June 1998



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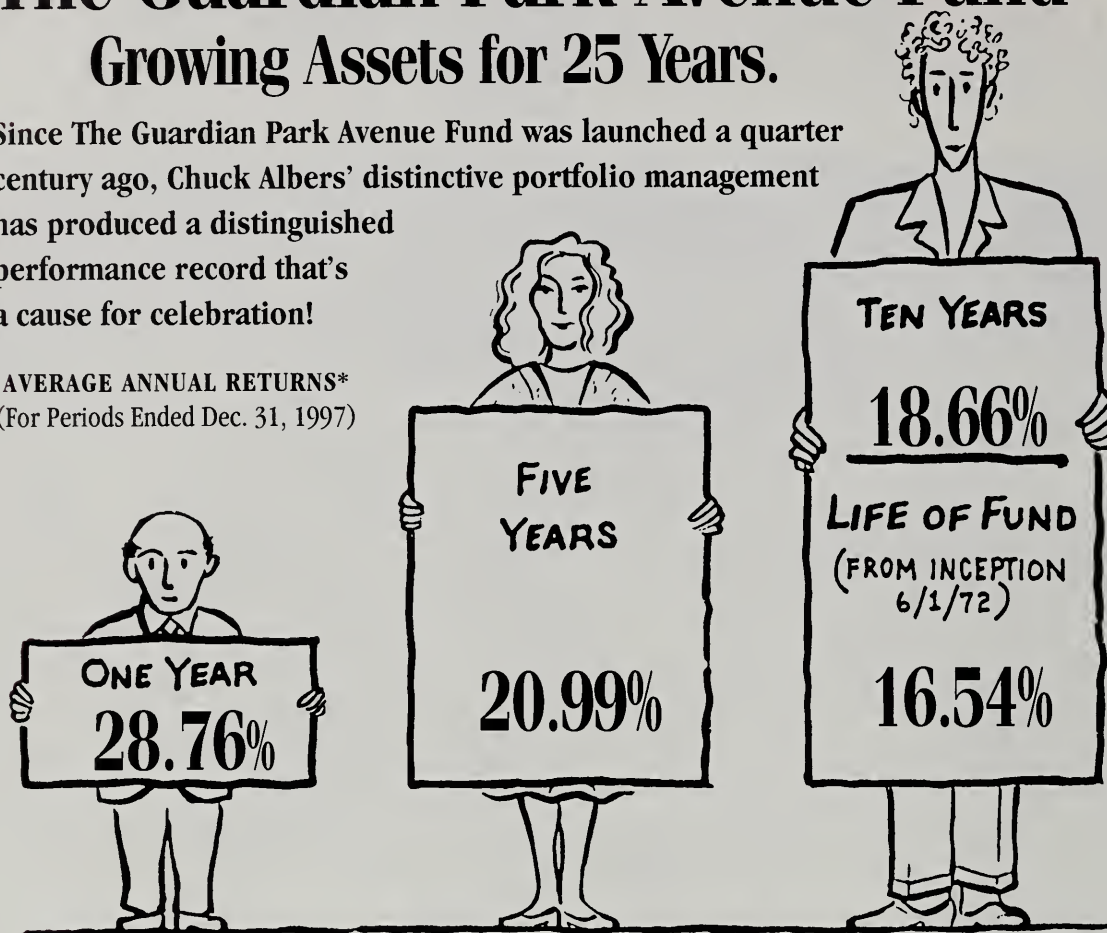
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THE JOURNAL OF THE ARKANSAS MEDICAL SOCIETY

Volume 95 Number 1

June 1998

*Award-Winning Journal of the Arkansas Medical Society
Recipient of the ASAE Excellence in Communications Award*

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Cover photograph taken by Franklin Washburn Photography in Little Rock. Annual Session photographs taken by Steve Asmussen of Little Rock. Photographs of Golf Tournament taken by Lynn Zeno, AMS Director of Governmental Affairs. Photograph of Lyda Campbell taken by Greer Lile of Little Rock.

Medicine in the News

Health Care Access Foundation

As of May 1, 1998, the Arkansas Health Care Access Foundation has provided free medical service to 13,910 medically indigent persons, received 26,581 applications and enrolled 52,377 persons. This program has 1,896 volunteer health care professionals including medical doctors, dentists, hospitals, home health agencies and pharmacists. These providers have rendered free treatment in 69 of the 75 counties.

National Market Trends

*A survey by New York's attorney general found that 18 of 31 HMOs surveyed failed over half the time to provide consumers with copies of the plan's subscriber contract and member handbook when asked. Plans are required to provide that information under a law enacted in 1997. The 18 included some of the state's largest plans, including Oxford Health Plans and Aetna U.S. Healthcare. In some cases, the plans flatly refused to provide the information. (*Albany Times Union* April 7, 1998, *New York Post*, April 7, 1998)

*Kaiser Permanente is raising premiums substantially as a result of huge losses in 1997. Some businesses will see their rates increase as much as 11%, and sources indicate that Kaiser is hoping to phase in rate increases up to 30% over the next three years. California's two largest employer purchasing coalitions, CalPERS and the Pacific Business Group on Health, are apparently considering options such as directly contracting with hospitals and medical groups in light of premium increases throughout the California market. (*San Francisco Chronicle*, March 31, 1998, *San Francisco Business Times*, March 30, 1998)

*The Texas Insurance Department has fined Harris Methodist Medical Plan \$800,000 for using financial incentives that encouraged primary care physicians to limit medically necessary care, in violation of the Texas Insurance Code. Harris Methodist penalized North Texas physicians for exceeding a predetermined budget for prescription drugs. The Dallas physicians have filed a class action lawsuit against Harris. The Insurance Department also noted that Harris failed to weight the degree of sickness of patients when determining its fee schedule. (*Dallas Morning News*, April 2, 1998)

*In a related development on April 8, the AMA applauded the Sara Lee Corporation's decision to sell its long-held international tobacco unit, DEVN Tobacco. Sara Lee was one of 13 publicly traded companies identified in 1996 by the AMA as manufacturers and distributors of tobacco products. The AMA called for di-

vestment of all stock in those companies. Dr. Smoak was quoted as saying, "We are pleased that Sara Lee recognizes that there are higher returns in protecting the health of the consumers who buy its desserts than there are in selling tobacco products in more than 100 countries abroad." A copy of this statement can be found on the AMA Web site at: <http://www.ama-assn.org/ad-com/releases/1998/98apr09.htm>.

*AMAP - The Idaho Medical Association became the third state medical association to sign on as an AMAP sponsor, joining the District of Columbia and Montana as sponsoring medical organizations, and New Jersey as the first partnering medical organization.

*New Mexico's Governor Gary Johnson (R) recently signed into law legislation providing consumer rights for patients in managed care plans. The law directs the insurance department to develop regulations that among other things, will require managed care plans to provide summaries of benefits and exclusions, provider panels, and premium information prior to or at the time of enrollment, to provide health care services that are reasonably accessible and available in a timely manner, and to adopt and implement prompt and fair grievance procedures for resolving patient complaints. The law also gives individuals a right to sue if they suffer damages as a result of violation of the act. (*BNA's Managed Care Report*, March 25, 1998)

*A study of 865 primary care physicians practicing in 60 medical groups in Washington State found that that method of primary care physician compensation (e.g. salary only, production-based, mixed systems) had virtually no impact on managed care enrollees' use of services or cost of care. The study found that the principle drivers of use and cost were characteristics of individual enrollees (e.g. age, female gender) and level of health plan benefit coverage. (*Journal of the American Medical Association*, March 18, 1999)

Information provide by the AMA Federation Communicator's Weekly newsletter dated the week of April 12, 1998.

Consumer Bill of Rights Ordered

Under a recent executive order issued by President Clinton, Medicare, Medicaid, and all other federal health plan programs are required to implement the consumer "bill of rights" package outlined by the administration last fall. The mandate reportedly will impact about 38 million seniors in Medicare, more than 30 million Medicaid recipients, as well as nine million federal workers covered under the Federal Employee Health Benefit program. The bill of rights gives people

who are either employed or insured by the federal government the rights to understandable information about their plans, external right of appeal for denial of coverage, increased ability to participate in decisions about medical treatment and other protections. Although many of the provisions of the bill of rights already exist in most federal health plans, some may have to augment their provisions in order to comply with the presidential order. While the executive order will impact millions of Americans enrolled in HMOs, congressional action is needed to reach private-employer health insurance plans.

Senior Citizens spend 19 Percent of Income on Health Care

The American Association of Retired Persons recently challenged Medicare to examine "the adequacy of the program for people it's supposed to protect." According to AARP's study which used 1997 figures, Medicare provides coverage and paid average benefits of \$5,032 a person. However, Medicare participants paid out \$2,149 or 19 percent of their income on health care. For the 3.5 million seniors living below poverty level, health care costs ate up 35 percent of their income.

Information provided by the EVPgram, a report from the Medical Society of the State of New York, dated March 6, 1998.

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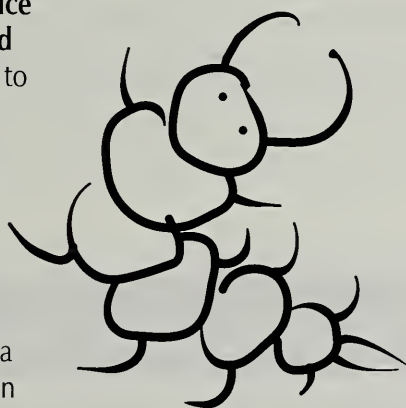
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TB Cases Continue to Fall - But Not for All

For the fifth year in a row, cases of tuberculosis have declined nationwide, according to new data from the CDC. The 19,855 new cases diagnosed last year represented a 7% decrease from 1996 and a 26% decrease from the epidemic's height in 1992. TB cases among native-born Americans declined almost 40% since 1992. The majority of new TB cases continue to be diagnosed in large cities and in six states (California, Florida, Illinois, New Jersey, New York, and Texas), all which have achieved large decreases in the disease since 1992. Rates of isoniazid resistance in 1997 cases with available drug susceptibility results were stable at 7.6%. Multidrug resistance was reported in 1.3% of cases, almost half of which were diagnosed in New York and California.

However, these encouraging statistics do not include foreign-born U.S. residents, who accounted for almost 40% of new TB cases in 1997 (versus 27% in 1992). Cases among immigrants actually rose 6% between 1992 and 1997, and rose almost 20% among those aged 45 to 64.

Comment: These statistics reflect the success of aggressive TB case-finding and treatment programs and probably also recent improvements in HIV treatment. They also emphasize that successful TB control in this country will increasingly depend on recognizing patterns of disease in the rest of the world. - A Zuger.

CDC: Tuberculosis morbidity - United States, 1997. MMWR 1998 Apr 10; 47-253-7.

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AMS Newsmakers

Dr. Marian Barr, a West Memphis physician of internal medicine, was the emcee-speaker at the Alpha Kappa Alpha Sorority Pi Chi Omega Chapter's seventh annual Twenty Pearls Scholarship Pageant recently. Dr. Barr, a graduate of Meharry Medical College, received the resident Physician of the Year Award while in training. She was the only female to receive the award in the 100-year history of the medical college.

Dr. Michael N. Moody, 1998-99 AMS President of Salem, recently attended the AMA Leadership Conference along with **Dr. Gerald A. Stolz Jr.**, AMS Council Chairman of Russellville; **Dr. J. Mayne Parker**, AMS Councilor of Little Rock; **Dr. Joe H. Stallings Jr.**, AMS Councilor of Jonesboro; **Ken LaMastus**, AMS Executive Vice President; and **Lynn Zeno**, AMS Director of Governmental Affairs.



Dr. Michael N. Moody, 1998-99 AMS President, with President Clinton at the AMA Leadership Conference.

Dr. Joseph L. Rosenzweig, a Hot Springs pediatrician, is the recent recipient of the C.D. Taylor President's Award from the Tulane University School of Medicine in New Orleans. The award recognizes outstanding service to the field of medicine in one's own community. Recipients of this award must have contributed to the betterment of their community by significant work with individuals or organizations.



Dr. Joseph L. Rosenzweig

Dr. Gerald M. Schumann, a family practitioner of Des Arc, was recently honored by White County Medical Center of Searcy as "favorite country doctor." Dr. Schumann was one of 450-plus doctors nominated for the title of "Country Doctor of the Year" for 1997. He was among the top three doctors named for the title by *Parade Magazine*.

Dr. Hiram Ward, a family physician from Murfreesboro, was recently honored for 30 years of membership in the American Academy of Family Physicians.

Dr. Phillip White, a family physician from Murfreesboro, was recently honored for five years of service as the Hospice Medical Director for Area Five, which includes the Pike County area.

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Dr. Moody takes his oath of office with Dr. Logan at his side.



AMS Past Presidents gather in support and honor of Dr. Moody as he takes the oath of office.

Dr. Logan places the President's Medallion around Dr. Moody's neck.





AMS 1998-1999 President Profile

Michael N. Moody, M.D.

Michael N. Moody, M.D., a Salem, Arkansas, family practitioner, was installed as president of the Arkansas Medical Society during the 122nd Annual Session at the Excelsior Hotel and Statehouse Convention Center in Little Rock on Friday, April 3, 1998.

Dr. Moody has maintained an active family practice at his clinic in Salem since 1976. In addition, he is Medical Director of the Arkansas Foundation for Medical Care and an assistant clinical professor for the Department of Family and Community Medicine at the University of Arkansas for Medical Sciences (UAMS).

Dr. Moody has been an AMS member since 1971. In those 27 years, he has served in numerous positions for the organization including chairman of the Nominating Committee, member of the Governmental Affairs Committee and secretary. Dr. Moody is a member of the American Medical Association and a past president of the Tri-County Medical Society and the Arkansas Academy of Family Physicians.

Dr. Moody is currently serving in appointed positions for the Drug Utilization Review Committee for Arkansas Medicaid; the Arkansas Board of Health; the Rural Health Advisory Council for the Arkansas Department of Health; the Fulton County Hospital Board of Governors; and the Medical Services Review Committee for Arkansas Blue Cross and Blue Shield. Past appointments include the Arkansas Health Services Commission; Gov. Bill Clinton's Task Force on Rural Hospitals; and Gov. Jim Guy Tucker's Task Force on Health Care Reform.

Dr. Moody is board certified as a diplomat of the American Board of Family Practice. He earned his medical degree from UAMS in 1972 and, in 1973, completed a family practice residency. Dr. Moody and his wife, Barbara, have three children.



Inaugural Address

The Challenge of Change

Michael N. Moody, M.D.
President 1998-1999

President Wootton, President Amonette, my many friends, colleagues, and guests... Welcome to the 122nd Annual Session of the Arkansas Medical Society. It is not only with pride, but also with humility, that I accept this honor. It's not really the presidency that is the source of my emotion, but rather the opportunity to continue working with this wonderful organization. Some say that one's success during his presidential year depends upon his ability to work with staff. If that's true, then we're going to have a great year because our AMS staff has such enormous talent and is such a pleasure to work with.

I am fortunate to have most of my family and several friends here tonight. I need to express my appreciation to them and to all the past-presidents gathered with us here this evening; and I need to pay tribute to a mentor not here this evening and an honored friend who is here tonight.

Past President Jim Armstrong was a special friend to me and one of my most loyal allies and supporters within this organization. We shared an advocacy for rural hospitals, access to health care in under-served areas, and continuous efforts to improve quality. We miss his sense of humor and thoughtful advice. Our thoughts are with his family this evening.

When I first became actively involved in the Arkansas Medical Society, our legislative chairman would leave his office almost every morning during the legislative session to lobby for our profession. We worked closely together in the Academy of Family Practice, and I have been honored to follow him as a past presi-

dent of that organization. It is a special pleasure for me to introduce my very good friend and mentor, AMS past president and current AMA delegate Dr. Jim Weber.

My theme for this evening is the challenge of change, and no one better personifies the willingness to accept that challenge than Dr. Weber. Three critical words or attributes come to mind as we consider how we should react to change: Tolerance, courage, and wisdom.

To illustrate the point, I'd like to ask you to think back to 16th century France. It was a time of tremendous change, frequently tumultuous, the "Age of the Inquisition."

Imagine a beautiful springtime Saturday afternoon, the sun shining bright. Recreation was very limited, and a favorite form of entertainment was the executions of the day. The town square was very crowded because, that day, three prisoners had been condemned to die by the guillotine. Judgment was swift, appeals very limited, and the only real chance of mercy was to appeal to the crowd. But, of course, a pardon would reduce the excitement of the day.

The first prisoner was a Catholic priest whose crime was tolerance. In a time of religious persecution and the emergence of new Protestant denominations, he had advocated the tolerance of different views and ecumenical dialogue. As he was brought forward on the platform, he was allowed one last statement to plead for his life. "I have lived my life in dedication and service to God," he said. "I have taught the words

of His son, and if this is the will of my Lord, then I am ready to be united with Him in Heaven." The crowd was unmoved and gave the thumbs down. The priest was placed in position, the executioner pulled the handle to release the blade of the guillotine; and nothing happened. The crowd was initially quiet, stunned, and amazed. Then someone shouted, "It's a miracle, release him." The words were repeated throughout the crowd over and over and louder and louder "It's a miracle, it's a miracle, release him, release him;" and the priest was given his freedom.

The second man condemned to die was an Admiral in the King's Navy. He had been convicted of failing to follow tradition in the midst of battle. After a long and brave battle at sea, his ship was fatally damaged and started to sink. As he started down with his ship, a broken mast floated by and he grabbed hold, floated to land, and later was sentenced to die for treason.

He also was allowed a last statement. "I have fought and won many great battles. I have served my King with bravery and loyalty to his kingdom. If this is his will, so be it." This time the crowd was even more anxious for its first execution, and again the thumbs down was given. The executioner pulled the release, and again nothing happened. After another initial stunned silence, the roar of "release him, release him, the King has spoken" grew from the crowd; and the great seaman was also released.

The third and final victim of the day was an engineer, a teacher, and a man of science. He had challenged the laws of Nature by suggesting that the earth was not flat and not even the true center of the universe. He taught that earth is but one planet revolving around the sun and that the sun is the true source of our energy and its gravitational pull controls our orbit. When his students also started advocating such new and controversial theories, the scholar was condemned to die. As he climbed onto the platform and approached the guillotine, he noticed the previous malfunctions were the result of a faulty release mechanism, slightly ajar. When he was given the opportunity for his last appeal, the only words he could think of were, "If you'll give me just a couple more minutes, I think I can fix that."

The sixteenth century was a time of revolutionary change and great turmoil. But, my colleagues, I submit to you that it has always been true, and that the only constant is constant change. Our twentieth century has seen two world wars, Korea, Vietnam, and a myriad of other armed conflicts. We've had the depression of the '30s and the prosperity of the '50s. We've seen the assassination of great leaders and the desegregation of southern schools.

In medicine, we've seen revolutionary new drugs come and go. Ether, for example, is now obsolete.

Before ether, the only reliable way to be put to sleep was an after dinner speech. We've been introduced to Medicare and Medicaid in the '60s and price freezes in the '70s. During the '80s, we heard more about third party payors and found that they no longer thought of us as physicians but simply as providers for their insurance products. We were introduced to the term HMO and in the 90's rapidly learned that the phrase health maintenance organization sometimes had little to do with "health maintenance" and had more to do with discounted fees for the doctors and restricted choices for patients. We were introduced to terms like "economic credentialling" and "disenrollment from a provider network." For the first time, the health care of employees became a commodity to be auctioned off to the lowest bidder.

But, as an ancient philosopher once said, "the decline of any civilization can occur only if its citizens fail to recognize the need for and embrace the necessity of great change."

And so, I challenge you to look upon the rapid evolution in our great profession as an opportunity for improvement. As AMA President Percy Wootton said yesterday, our first and most important job is to review and revitalize the sanctity of the patient-physician relationship. Our patients will be our most dedicated allies, but only if we are their most vocal advocates.

As I begin my year as president of the Arkansas Medical Society, I want to emphasize three things and ask for your support in building upon the trust and respect our profession already enjoys.

These three things are: the tolerance to discuss differences, the courage to effect change, and the wisdom to realize when that change is necessary.

We cannot allow those forces outside of medicine to divide and conquer. So, whether we consider ourselves primary care physicians or sub-specialists, whether we value cognitive or procedural skills, whether we are self-employed or work for a physician network, even if we are affiliated with competing managed care networks, we must remember the lesson of the Catholic priest who advocated religious tolerance and realize we are all one within the house of medicine.

Just as the great sea captain fought and won many battles, we must have the courage to fight for the right of our patients to choose their own physician and work continuously to improve the quality of the health care they receive. During the next legislative session, the Arkansas House of Representatives will have a much different look because of term limits. Over half of the members will be new with the most experienced having been there only four years. This will make our efforts at grassroots involvement even more critical. We will reach out to the membership and remind them

that they have to be not only the heart and soul of this organization but must also be the brains and brawn if our challenge for change is to become that opportunity for improvement. And, as AMA Alliance President Johnnie Amonette said yesterday, we should enlist the army of the AMS Alliance to be the arms and legs to further that effort. We have a strong legislative team with LaMastus, Zeno, Wroten, Mike Mitchell, and Laura; but, we will occasionally lose some battles. I trust Zeno and others of us in leadership positions will not always be required to go down with the ship.

We must have the wisdom and good judgment to realize which battles should be fought, which challenges to accept, and which changes should be made; always keeping our patients at the center of our universe. Remember the great scholar who offered to fix the faulty guillotine? I'm counting on the AMS staff, and my very good friends and colleagues throughout the state, to prevent us from trying to fix that which is not broken or to revive that which should remain a part of the past.

And finally, let us have the tolerance and understanding to put aside our own self-interests to work toward a community united in this honorable profession and united in this truly great organization, the Arkansas Medical Society.

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1998 Convention Speakers



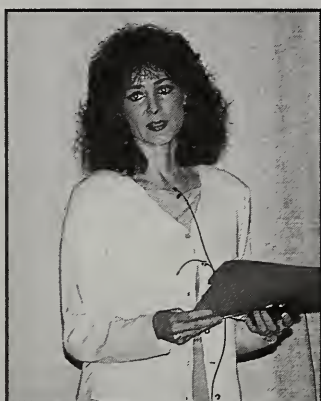
Keynote Address

Percy Wootton, M.D., of Richmond, Virginia, is a private practitioner of internal medicine with a subspecialty in cardiology. He became President of the American Medical Association in June 1997. Dr. Wootton has served on the AMA Board of Trustees since 1991 and has been a member of the AMA House of Delegates since 1974. His keynote address may be read beginning on page 20 of this issue of *The Journal*.

Shuffield Lecture

"A Washington Insider's Perspective on National Politics"

Carlyle Gregory, Jr., established The Carlyle Gregory Company after building upon years of first-hand experience in political campaigns. In 1978, he managed Newt Gingrich's first successful bid for Congress. He served as Field Director for the National Republican Congressional Committee from 1991-1995 and as Special Assistant for Political Affairs under President Ronald Reagan. Mr. Gregory, a graduate of Washington and Lee University, has participated in the AMA's AMPAC training programs for the past five years.



1st Feature Session

"Issues in Death and Dying:

A Dramatic Trilogy"

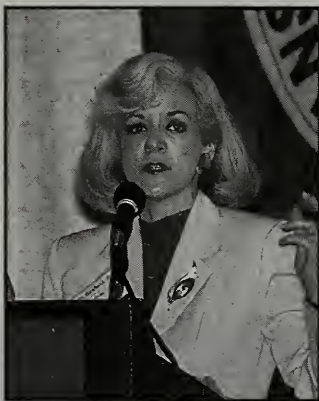
Julie Russell, R.N., M.A., identifies herself as a nurse dramatist. Her original dramatic monologues address quality issues from the perspective of the health care consumer and are designed to raise questions and challenge assumptions. She is a visiting professor for the Department of Sociology at the University of Missouri-Kansas City.



1998 Convention Speakers

2nd Feature Session "Avoiding the Pitfalls of Fraud and Abuse"

Sandra W. Cherry, J.D., Linda Little and Ivian C. Smith were the featured speakers of this session. Cherry is an Assistant United States Attorney in Little Rock; Little is Regional Inspector General for the United States Department of Health and Human Services in Dallas, Texas; and Smith is Special Agent In-Charge of the Federal Bureau of Investigations-Arkansas in Little Rock.



3rd Feature Session

"Redefining the Future of Health Care: When Low Cost is No Longer Enough"

Alice G. Gosfield, J.D., of Philadelphia, Pennsylvania, has been practicing health law and health care regulation since 1973. She places a special emphasis on matters related to physician representation, managed care, non-institutional reimbursement, medical staff issues, fraud and abuse, utilization and quality issues. She is a graduate of Barnard College and NYU Law School.

Seminar for Young Physicians

"Medical Practice - 1998 and Beyond"

L. Michael Fleischman, of Atlanta, Georgia, earned a degree in Sociology from the University of Missouri-Columbia with advanced training in epidemiology, community health analysis and health care finance. He has worked as an educational specialist and clinic director for the Centers for Disease Control and Prevention. A principal with Gates, Moore & Company, Mr. Fleischman specializes in alternate delivery systems, practice valuation, managed care negotiations, and university and hospital-based teaching practices.



1998 Arkansas Medical Society Annual Session

	Officers	First Session	Second Session
President	Charles Logan	present	present
President-elect	Michael N. Moody	present	present
Vice President	Steve Thomason	-	present
Secretary	Carlton Chambers	present	present
Treasurer	Lloyd Langston	present	present
Speaker	Anna Redman	present	present
Vice Speaker	Kevin Beavers	-	-
Immediate Past President	John Crenshaw	present	present

	Councilors		
District 1:	Joe Stallings	present	present
	Dwight Williams	present	present
	Joe V. Jones	present	present
District 2:	Lloyd Bess	present	-
	Daniel Davidson	-	present
District 3:	Dennis Yelvington	present	-
	P. Vasudevan	present	present
District 4:	John O. Lytle	present	present
	Harold Wilson	present	present
District 5:	William Dedman	present	present
	Fred Murphy	-	present
District 6:	Michael Young	present	present
	Samuel Peebles	-	-
District 7:	Robert McCrary	present	-
	Brenda Powell	present	present
District 8:	David Barclay	present	present
	Joseph Beck	-	-
	C. Reid Henry, Jr.	present	present
	Anthony Johnson	-	-
	William Jones	present	present
	J. Mayne Parker	present	present
	Edward Sae	present	present
	Samuel Welch	-	-
	John L. Wilson	present	-
District 9:	Anthony Hui	present	present
	William McGowan	-	-

District 10:	Jan Turley	present	present
	Oliver Wallace	present	present
	Mike Berumen	-	present
	Gerald Stolz	present	present
	John Swicegood	-	-
	Paul Wills	-	-

	Past Presidents		
1979-1980	A. E. Andrews	present	-
1971-1972	C. Stanley Applegate	-	-
1993-1994	Glen F. Baker	-	-
1985-1986	John P. Burge	present	present
1996-1997	John Crenshaw	-	-
1983-1984	Asa A. Crow	-	-
1964-1965	C. Randolph Ellis	-	present
1951-1952	Charles R. Henry	-	-
1982-1983	Morriss M. Henry	-	-
1988-1989	John M. Hestir	present	present
1990-1991	William N. Jones	-	-
1987-1988	W. Ray Jouett	present	present
1976-1977	Albert S. Koenig	present	-
1994-1995	James M. Kolb, Jr.	-	-
1980-1981	Kemal E. Kutait	-	-
1992-1993	J. Larry Lawson	present	present
1986-1987	Ken Lilly	-	-
Honorary	C. C. Long	-	-
1967-1968	Joseph Norton	-	-
1974-1975	Ben Saltzman	-	-
1981-1982	Purcell Smith	-	-
1968-1969	H. W. Thomas	-	-
1975-1976	T. E. Townsend	-	-
1991-1992	George Warren	-	-
1989-1990	James Weber	-	-
1984-1985	Charles Wilkins	-	-
1973-1974	John Wood	-	-
1978-1979	George Wynne	-	-

House of Delegates Composition

County	Delegates	First Session	Second Session
Arkansas (1)	Noble Daniel	present	-
Ashley (1)	Barry Thompson	-	-
	Don Toon	-	-
Baxter (2)	Robert Baker	present	present
Benton (4)	NOT REPRESENTED		
Boone (2)	Sue Chambers	present	present
	Charles Klepper	present	-
Bradley (1)	Joe Wharton	-	-
	Kerry Pennington	-	-
Carroll (1)	NOT REPRESENTED		
Chicot (1)	NOT REPRESENTED		

Clark (1)	Noland Hagood	-	-
	Mark Jansen	-	-
Cleburne (1)	NOT REPRESENTED		
Columbia (1)	Fred Murphy	-	present
Conway (1)	NOT REPRESENTED		
Craighead			
/Poinsett (7)	Vestal B. Smith	present	present
	Dennis Parten	-	-
	Joe Stallings	present	present
Crawford (1)	R. Wendell Ross	-	-
Crittenden (2)	G. Edward Bryant	present	present
Cross (1)	NOT REPRESENTED		
Dallas (1)	John Delamore	-	-
	Don Howard	-	-
Desha (1)	NOT REPRESENTED		

House of Delegates Composition *(continued)*

Drew (1)	Paul Wallick	present	-
Faulkner (2)	Randal Bowlin	-	-
	Ben Dodge	-	-
Franklin (1)	David Gibbons	present	-
Garland (7)	NOT REPRESENTED		
Grant (1)	NOT REPRESENTED		
Greene/Clay (2)	Dwight Williams	present	present
	Leonus Shedd	present	-
	Roger Cagle	-	present
Hempstead (1)	NOT REPRESENTED		
Hot Spring (1)	NOT REPRESENTED		
Howard/Pike (1)	NOT REPRESENTED		
Independence (2)	J.R. Baker	present	present
	William Waldrip	present	present
Jackson (1)	M.A. Chauvin	present	-
Jefferson (5)	Simmie Armstrong	present	present
	Sue Frigon	-	-
	David Jacks	present	present
	George Roberson	-	-
	William Joe James	present	-
	Charles Mabry	-	present
	Kim Garner	-	present
	T.E. Townsend	-	present
Johnson (1)	NOT REPRESENTED		
Lafayette (1)	Brad Harbin	present	-
Lawrence (1)	Robert Quevillon	present	present
Lee (1)	Duong Ly	-	-
	Leon Waddy, Jr.	-	-
Little River (1)	James Vorhease	present	present
Logan (1)	NOT REPRESENTED		
Lonoke (1)	NOT REPRESENTED		
Medical Student	Kim Roberts	present	present
Miller (3)	John Ford	-	-
	Joseph Robbins	-	-
	F.E. Joyce	-	-
Mississippi (1)	Eldon Fairley	present	present
Monroe (1)	NOT REPRESENTED		
Nevada (1)	NOT REPRESENTED		
Ouachita (1)	Jerry Kendall	-	-
Phillips (1)	Marion McDaniel	present	present
Polk (1)	Karen Perry	present	-
Pope (3)	Charles Jones, Jr.	-	-
	James Kolb	-	-
	David Murphy	present	present
Pulaski (39)	William Ackerman	present	present
	D. B. Allen	-	-
	Shelly Baldwin	-	present
	Brad Baltz	-	-
	Reginald Barnes	-	-
	Ray Biondo	present	present
	Karen Burks	-	-
	Bob Cogburn	-	-
	Michael Cope	-	-
	David Coussens	-	-
	Philip Deer, III	-	-
	Shirley DesLauriers	present	present
	Bradley Diner	present	-
	Tom Eans	present	present
	Jim English	-	present
	Max Ann Ferguson	-	present

	Scott Ferguson	-	present
	Thomas Frazier	-	-
	T.S. Harris	present	-
	Fred Henker	present	present
	Steve Hodges	-	-
	Harold Hutson	present	-
	Jim Ingram	-	-
	Thomas Jansen	-	-
	Carl Johnson	-	-
	Gail Jones	-	-
	Stanley Kellar	-	-
	David King	-	-
	Marvin Leibovich	-	-
	Stephen Magie	present	-
	Valerie McNee	present	present
	Rickey Medlock	-	-
	David Miles	present	-
	Tena Murphy	-	-
	Fred Nagel	-	-
	George Norton	-	-
	Carl Raque	present	present
	John Redman	present	present
	Charles Rodgers	-	present
	Deanna Ruddell	present	present
	Frank Sipes	present	present
	Kemp Skokos	present	present
	Angy Yeager-Bock	present	present
	Suzanne Yee	-	-
	Joseph Ward	present	present
Randolph (1)	NOT REPRESENTED		
Saline (2)	Joe Martindale	present	-
Sebastian (12)	Paul Anderson	present	-
	Mike Berumen	-	present
	Randy Ennen	-	-
	R. Cole Goodman	-	-
	Michael Gwartney	-	-
	David Hunton	-	-
	Greg Jones	-	-
	L. Jane McKinnon	present	present
	Jerry Stewart	present	-
	John Swicegood	-	-
	Timothy Waack	-	-
	John Wells	-	-
	Morton Wilson	present	present
Sevier (1)	NOT REPRESENTED		
St. Francis (1)	NOT REPRESENTED		
Tri-County (1)	NOT REPRESENTED		
Union (3)	NOT REPRESENTED		
Van Buren (1)	Harry Starnes	present	-
Washington (8)	D. Wayne Brooks	-	present
	Anthony Hui	-	-
	Sanford Hutson	present	-
	Linda McGhee	-	-
	Lawrence Schemel	-	-
	Charles Sisco	present	present
	Janet Titus	present	present
White (3)	NOT REPRESENTED		
Woodruff (1)	NOT REPRESENTED		
Yell (1)	James Maupin	present	present

House of Delegates

First Session - April 2, 1998

Speaker of the House Anna Redman, M.D., called the meeting to order on Thursday, April 2, 1998, at the 122nd annual meeting of the Arkansas Medical Society. Dr. Carlton Chambers gave the invocation.

Speaker Redman introduced Barbara Moody, President of the Arkansas Medical Society Alliance; Johnnie Amonette, President of the American Medical Association Alliance; Gwen Pappas, President of the Southern Medical Association Auxiliary; and Karen McNiece, President of the Arkansas Medical Society Medical Student Section. Barbara Moody presented I. Dodd Wilson, M.D., Dean of the University of Arkansas College of Medicine, with two grants from the AMA Education and Research Foundation. The \$4,024 is intended for the pursuit of excellence in the medical school's program (there are no restrictions on the use of this money) and \$13,743 which is restricted to the school's program of financial assistance for medical students.

Upon motion, the House adopted the minutes of the 121st annual session as published in the June 1997 issue of *The Journal of the Arkansas Medical Society*.

Candy Keller, M.D., Board Member of the AMA Political Action Committee, presented Scott Ferguson, M.D., with a plaque for first place in greatest percentage increase in membership in AMPAC.

Gerald Stolz, M.D., Chairman of the Council, presented plaques to David Barclay, M.D., who served on the Council from 1988 to 1998; Dwight Williams, M.D., who served on the Council from 1991 to 1998;



Gerald Stolz, M.D., Chairman of the AMS Council.

and Lloyd Langston, M.D., who served as treasurer from 1992 to 1998. A plaque will be sent to John Swicegood, M.D., who served on the Council from 1996 to 1998.

Speaker Redman announced the following vacancies on the state boards. Two vacancies will occur December 31, 1998, in the members-at-large positions on the Arkansas State Medical Board.

The terms of office are for eight years. Members serving in these positions are Ray Jouett, M.D., from Springdale, and Steven Collier, M.D., from Augusta, who are eligible for re-nomination. Dr. Jouett is currently serving as chairman of the Arkansas State Medical Board.

A vacancy will occur December 31, 1998, in the Second Congressional District position of the Arkansas State Board of Health. The term of office will be for four years. Kenneth Meacham, M.D., from Searcy, is serving in this position, and he is eligible for renomination.

Speaker Redman also announced the 1998-1999 Nominating Committee members: District #1: Joe Jones, M.D., Blytheville; District #2: J. R. Baker, M.D., Batesville; District #3: Marion McDaniel, M.D., Helena; District #4: Paul Wallick, M.D., Monticello; District #5: Fred Murphy, M.D., Magnolia; District #6: Michael Young, M.D., Prescott; District #7: Timothy Webb, M.D., Hot Springs; District #8: C. Reid Henry, Jr., M.D., Little Rock; District #9: Anthony Hui, M.D., Fayetteville; and District #10: Paul Wills, M.D., Fort Smith.

John Burge M.D., introduced Percy Wootton, M.D. Dr. Wootton became president of the American Medical Association in June 1997 and has served on the AMA Board of Trustees since 1991. Dr. Wootton gave an update on AMA activities.

There being no further business, the meeting adjourned until Saturday, April 4, 1998.



Candy Keller, M.D., Board Member of the AMA Political Action Committee presents a plaque to Scott Ferguson, M.D.

House of Delegates

Final Session - April 4, 1998

Speaker of the House Anna Redman, M.D., called the meeting to order on Saturday, April 4, 1998 and gave the invocation.

Dr. Redman reminded the delegates that the Arkansas Medical Society Bylaws require officers and councilors to be present at the meeting in order to be elected. Several nominees were not able to be present. Upon motion, the House voted to suspend the rules that require members to be present to be elected. Harold Wilson, M.D., Chairman of the Nominating Committee, presented the following slate of officers:

President-elect: Lloyd Langston, M.D., Pine Bluff

Vice President: Steven Thomason, M.D., Little Rock

Treasurer: Dwight Williams, M.D., Paragould

Secretary: Carlton Chambers, M.D., Harrison

Speaker of the House: Anna Redman, M.D., Pine Bluff

Vice Speaker of the House: Kevin Beavers, M.D., Russellville

Delegates to the AMA:

John Burge, M.D., Lake Village

William Jones, M.D., Little Rock

Alternate Delegate to the AMA:

Anna Redman, M.D., Pine Bluff

John Hestir, M.D., DeWitt

Councilors:

District 1: Roger Cagle, M.D., Paragould

District 2: Daniel Davidson, M.D., Searcy

District 3: Parthasarathy Vasudevan, M.D., Helena

District 4: Harold Wilson, M.D., Monticello

District 5: Fred Murphy, M.D., Magnolia

District 6: Samuel Peebles, M.D., Nashville

District 7: Robert McCrary, M.D., Hot Springs

District 8: Edward Saer, M.D., Little Rock

John Wilson, M.D., Little Rock

Fred Nagel, M.D., North Little Rock

District 9: William McGowan, M.D., Springdale

Oliver Wallace, M.D., Green Forest

District 10: Gerald Stolz, M.D., Russellville

James Henry, M.D., Fort Smith

President-elect Lloyd Langston, M.D., was escorted to the podium by John Crenshaw, M.D., and Thomas E. Townsend, M.D., for a brief acceptance speech.

The next order of business was the reports from the Reference Committees. The adoption of these reports was approved and is printed in the June 1998 issue of *The Journal of the Arkansas Medical Society*.

Gerald Stolz, M.D., reported on the activities of

the Council during the annual session. As part of this report David Wroten updated members of the House of Delegates of the pending Patient Protection Act lawsuit. The case has been presented to the Eighth Circuit Court of Appeals and a decision is pending. Upon motion, the report of the Council was accepted.

Speaker Redman announced the following nominees:

Arkansas State Medical Board: Member-at-Large Position #1: Ray Jouett, M.D., Springdale; Porter Rodgers, M.D., Searcy; and Roger Cagle, M.D., Paragould. **Member-at-Large Position #2:** Steven Collier, M.D., Augusta; Paul Wallick, M.D., Monticello; and Orman Simmons, M.D., Little Rock.

Arkansas State Board of Health: Kenneth Meacham, Searcy; William Jones, Little Rock; and Robert Rook, Conway (non AMS-member – this item will be referred to the AMS Executive Committee.)

Speaker Redman also announced that Paul Wallick, M.D., from Monticello, had been chosen Chairman of the Nominating Committee and Michael Young, M.D., from Prescott, as Secretary.

Michael Moody, M.D., addressed the House and announced that one of his priorities as president was to improve communication between the state medical society and grassroots organizations. Dr. Moody told the House that the AMS staff and he were anxious to visit at county medical society meetings.

John Crenshaw, M.D., addressed the House and noted the increase in feminine influence in our leadership and medical student section.

There being no further business the meeting adjourned.



The House of Delegates Meeting brings in a full house.



Keynote Address

Protecting Our Patients and Our Profession

Percy Wootton, M.D.
American Medical Association President

Good evening. And thank you, everyone, for your warm welcome. On behalf of the AMA and our 300,000 member physicians and medical students, I am pleased to have the opportunity to speak to you tonight at the opening of your House of Delegates.

And I am very pleased to celebrate the leadership role you, the Arkansas Medical Association, have taken in creating medicine's future today. You are a shining example to all of us in organized medicine. First, in membership. As for the nineteenth remarkable, consecutive year - ever since 1969 - Arkansas has again grown its AMA membership share. An achievement even more outstanding in an era when membership across all of organized medicine has been on a downward slope. I congratulate you sincerely and truly. But that's not all. Because for the second year in a row, you have also earned an award for increased AMPAC membership.

You know, more than 50,000 physicians across the nation belong to AMPAC. And through their contributions, they are helping to elect lawmakers who are willing to listen to medicine's point of view. But you, here in Arkansas - you lead the entire nation in meeting and exceeding our PAC participation goals. Really and truly, you've earned the prize. Here to present that award, I'm told, will be Dr. Candace Keller, of the AMPAC Board.

As though your AMPAC accomplishments weren't enough... I am amazed and delighted to see that two Arkansas physicians are running for the U.S. Senate. With another physician running to renew his seat in the U.S. House of Representatives. While we in orga-

nized medicine do have a number of good friends on Capitol Hill, clearly it means a great deal to medicine when physicians themselves are actually elected to hold office; physicians who understand thoroughly the needs of our patients and our profession.

You know, in the fifty years before Senator, and Doctor, Bill Frist came to represent Tennessee, there had been only one practicing physician in the Senate. Now we may have another doctor-senator, from Arkansas. They deserve your consideration and support. Not just financial support, but active involvement in their campaigns. Now, for the Senate you've got your choice - a Democrat or a Republican. There's Dr. Fay Boozman, a Republican from Rogers, Arkansas. And there's Dr. Scott Ferguson, a Democrat from West Memphis. And then running to retain his seat in the U.S. House of Representatives, you have Dr. Vic Snyder, from right here in Little Rock. Make a special effort to meet these candidates and find out how you can help. And as you do, you will be helping to strengthen medicine's voice through one of the most effective means possible. And doing a great service for the health of our patients - and our profession.

My personal hero - Mr. Thomas Jefferson - had this to say about good health: "You may promise yourself everything, but without health - there is no happiness. Attention to health, then, should take the place of every other object." I am sure that's something we all can agree on. And of course, one of Arkansas' most famous native sons, our Chief Executive, President Bill Clinton, has made health care a major concern in his administration. His ideas, initiatives and programs

have generated national awareness and debate and have refocused needed attention on important issues affecting the health of all Americans. During his presidency, the AMA has dialogued with the President and his administration on a great many issues affecting health care. Sometimes we've been in agreement, sometimes not. Like the question of extending Medicare benefits to people between the age of 55 and 64, to close the gap in coverage caused by those taking early retirement. We applaud Mr. Clinton's intentions. But at the same time, we believe that a program already traumatized by excessive bureaucracy and price controls must do more to serve existing beneficiaries before throwing its doors open to others. The President's proposal is still preliminary, but we are concerned about the potential negative impact that adding new patients to the program might have - and we will be monitoring this issue closely in the coming months.

Regardless of how our viewpoints may differ on specific topics, we've appreciated President Clinton's willingness to tackle tough issues facing health care today, and for making health care a priority issue. We particularly appreciate how he has taken action to improve quality in health care. His President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry - on which our own AMA Board Chair, Dr. Tom Reardon, has served - has put forth important strategies aimed at protecting patients in our changing health care environment. The culmination of their work was the much publicized "Patient Bill of Rights," released last November. This important document includes nearly all of the patient protections that the AMA has been fighting for through years of concerted advocacy. Protections like: Choice. Disclosure. Fair recourse and appeals. And, of course, the foundation of all those protections is preserving the patient-physician relationship.

Nothing, to me, is more important. In fact, I view the patient-physician relationship as a covenant - a sacred trust between the medical profession and society that must never be breached - and never be broken. Protecting that covenant has been my top priority as president of the American Medical Association. Keeping this relationship strong and keeping the dialogue open with our patients. Hearing what they say, and what each individual patient truly needs from his or her health care coverage. And that's why I was happy to welcome President Clinton when he spoke to our AMA's National Leadership Conference last month in Washington, D.C.

At the Conference, Mr. Clinton made his own strong point about the importance of the patient-physician relationship. Here is what he said: "When a doctor spends almost as much time with a bookkeeper as with a patient, something is wrong. If you have to spend more time filling out forms than making rounds, something is wrong."

In today's increasingly bureaucratic health care environment, that is a message I'm glad to repeat. As a physician, my paperwork will never come before my duty to my patients. And I know that you, as physicians, feel exactly the same. In fact, one of the major issues on medicine's mind at the moment has to do with such paperwork. And it is an issue in which organized medicine is taking a leadership role. I'm talking about HCFA's 1997 revised Documentation Guidelines for Evaluation and Management Services. Every place I travel these days, physicians ask me about these new E&M guidelines. And they write me letters - many, many letters - asking for help in interpreting these directions.

Let me tell you, at the AMA we are well aware of the concern and the frustration our members feel at this latest demand on the practice of medicine. And we share that concern, one hundred percent. We believe that these guidelines as currently developed may be onerous for many physicians. And that they truly need more input from medicine. And we're working to provide it. As you know, with the specialty societies, the AMA has been working on these guidelines for quite some time now. And late last year, responding to physician concerns, the AMA won a key delay from HCFA on implementation of the 1997 E&M guidelines. Now we are using our time productively. With the support of our AMA House, right now we are working on a three-pronged approach to tackle the E&M problem. Our three goals: First, to protect physicians from unwarranted fraud and abuse penalties. Next, to secure significant changes in the guidelines themselves. And third - when the time comes - to provide physicians with an intense Federation-driven education program to help them with implementation.

But in order to succeed, every phase of this effort will require the input of the full spectrum of organized medicine. And that is why we are encouraging physicians to speak out now - so that the AMA can speak with authority on medicine's behalf. Working through their state and specialty societies, physicians have been asked to comment on the necessary and important changes they believed the guidelines would require. Now these comments, which we received last month, will be discussed directly by state and specialty leaders with representatives of your AMA Board of Trustees, CPT Editorial Panel and HCFA during a special fly-in meeting scheduled later this month in Chicago.

Now to some, E&M Guidelines may seem like just another physician paperwork issue, but I assure you, the increasing documentation time is a patient issue as well. That's why we've already made HCFA aware that corrections are only one step in the process. And that what is needed is not just an extension, but instead, as our House of Delegates called for in December, a pilot program to test the revised guidelines. So that we all can examine the process and see how much

time is actually needed in a day to document properly under the corrected guidelines.

One place that time must not come from, is the time we need for patient care. This is why a pilot program is essential. And that is the message we are carrying straight to HCFA these days. Because, no matter what, we must come to resolution. We know that E&M documentation, in some form, is here to stay.

The 1994 guidelines are already in use. And the truth is, when done right - documentation can be a useful tool for improving patient care and fostering clinical competence. But, again, the guidelines must be done right, and they must be fair. Because the overwhelming majority of the rank and file of physicians are honest and truthful. And we must insist without hesitation that physicians be treated as the ethical professionals that we are. Because right now the government seems to be saying that physicians are guilty until proven innocent. And that is just not right. As the poet Robert Frost used to say, "The world is full of willing people ...some willing to work and the rest willing to let them." Your presence here shows which of those two groups you belong to.

Whether it is E&M guidelines, electing physician candidates or supporting medicine's agenda in Washington and our statehouses, we physicians have a critical role to play in shaping the future of health care for our patients, for our profession, for our nation. As physicians, we are the experts on health care, we know

what is best for our patients, and we must be involved in guiding the policies and practices governing their care. Americans deserve a health care system that provides effective, efficient and appropriate care to all who need it. But such a system can only be developed with physician input. We know that medicine's issues cannot gain support in Washington unless they have grassroots support. So let the needs of your patients fuel your thoughts and guide your actions. Because, after all, they are the real reason we're here in the first place.

Ask yourself what issues are important for them. And then work to address them. Because it doesn't matter if you practice in a rural area, a big city like Little Rock, or somewhere in between...when patients visit your office, they do so because they want competent and compassionate care. Our patients deserve it and our profession demands it.

And today more than ever, each of us has an important role to play creating an environment and health care system that is ready and able to provide such care. With your help, we will get the job done. And we will keep American medicine the very best in the world.

Good luck and Godspeed in all your deliberations this week. We look forward to your decisions. And for all that you have decided and done on medicine's behalf already, sincere congratulations from me, and from your AMA.

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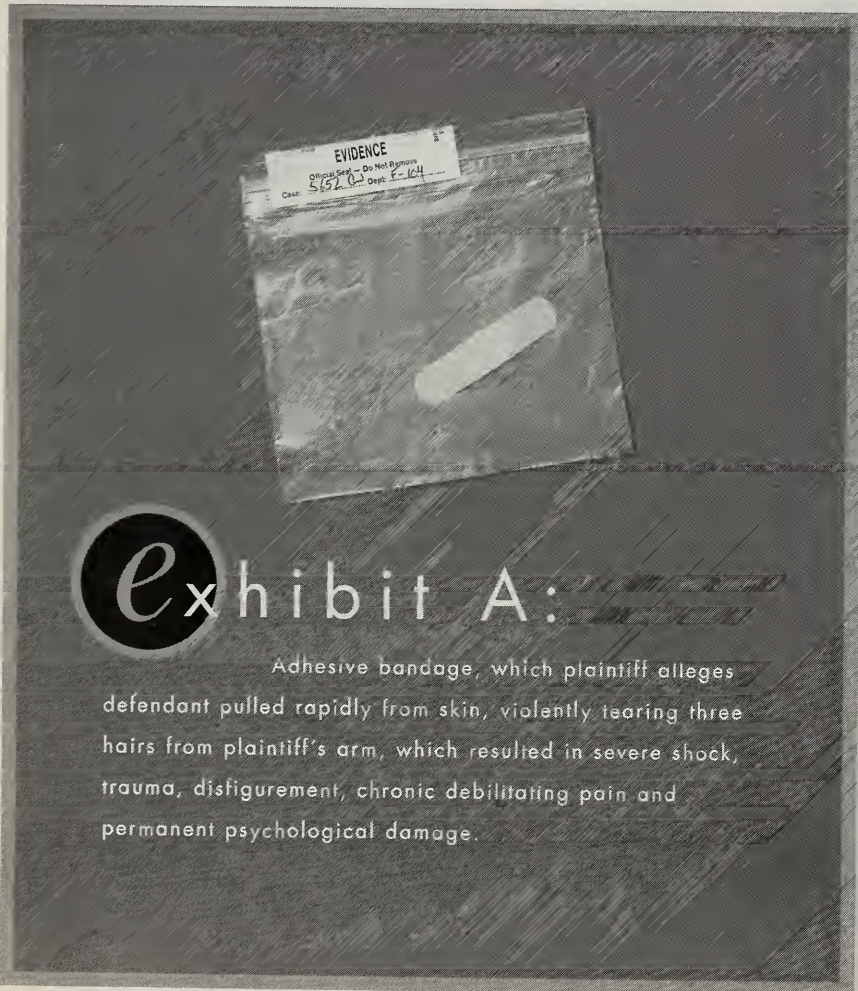


Exhibit A:

Adhesive bandage, which plaintiff alleges defendant pulled rapidly from skin, violently tearing three hairs from plaintiff's arm, which resulted in severe shock, trauma, disfigurement, chronic debilitating pain and permanent psychological damage.

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Charles Logan, M.D., Little Rock, Immediate Past President
Carlton Chambers, M.D., Harrison, Secretary
Dwight Williams, M.D., Paragould, Treasurer
Anna Redman, M.D., Pine Bluff, Speaker, House of Delegates
Kevin Beavers, M.D., Russellville, Vice Speaker, House of Delegates

AMS Executive Committee Members

Gerald Stolz, Jr., M.D., Russellville, Chairman of the Council
Michael N. Moody, M.D., Salem, President
Lloyd Langston, M.D., Pine Bluff, President-elect
Carlton Chambers, M.D., Harrison, Secretary
Dwight Williams, M.D., Paragould, Treasurer
Charles Logan, M.D., Little Rock, Immediate Past President

Councilors and Councilor Districts

First District: Roger Cagle, M.D., Paragould (2000); Joe Stallings, M.D., Jonesboro (1999); Joe V. Jones, M.D., Blytheville (1999) - Clay, Craighead, Crittenden, Greene, Lawrence, Mississippi, Poinsett, Randolph

Second District: Daniel Davidson, M.D., Searcy (2000); Lloyd Bess, M.D., Batesville, (1999) - Cleburne, Conway, Faulkner, Fulton, Independence, Izard, Jackson, Sharp, Stone, White

Third District: Parthasarathy Vasudevan, M.D., Helena (2000); Dennis Yelvington, M.D., Stuttgart (1999) - Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis, Woodruff

Fourth District: Harold Wilson, M.D., Monticello (2000); John O. Lytle, M.D., Pine Bluff (1999) - Ashley, Chicot, Desha, Drew, Jefferson, Lincoln

Fifth District: Fred Murphy, M.D., Magnolia (2000); William Dedman, M.D., Camden (1999) - Bradley, Calhoun, Cleveland, Columbia, Dallas, Ouachita, Union

Sixth District: Samuel Peebles, M.D., Nashville (2000); Michael Young, M.D., Prescott (1999) - Hempstead, Howard, Lafayette, Little River, Miller, Nevada, Pike, Polk, Sevier

Seventh District: Robert McCrary, M.D., Hot Springs (2000); Brenda Powell, M.D., Hot Springs (1999) - Clark, Garland, Grant, Hot Spring, Montgomery, Saline

Eighth District: Fred Nagel, M.D., North Little Rock (2000); John L. Wilson, M.D., Little Rock (2000); Edward Saer, M.D., Little Rock (2000); Joseph Beck, M.D., Little Rock (1999); C. Reid Henry, Jr., M.D., Little Rock (1999); William Jones, M.D., Little Rock (1999); J. Mayne Parker, M.D., Little Rock (1999); Anthony Johnson, M.D., Little Rock (1999); Samuel Welch, M.D., Little Rock (1999) - Pulaski

Ninth District: William McGowan, M.D., Springdale (2000); Oliver Wallace, M.D., Green Forest (2000); Anthony Hui, Fayetteville (1999); Jan Turley, M.D., Rogers (1999) - Baxter, Benton, Boone, Carroll, Madison, Marion, Newton, Searcy, Van Buren, Washington

Tenth District: James Henry, M.D., Fort Smith (2000); Gerald Stolz, M.D., Russellville (2000); Mike Berumen, M.D., Fort Smith (1999); Paul Wills, M.D., Fort Smith (1999) - Crawford, Franklin, Johnson, Logan, Perry, Pope, Scott, Sebastian, Yell



Reference Committee #1

L. Jane McKinnon, M.D., Chairman

Reference Committee #1 was composed of: Dr. Mike Berumen, Fort Smith; Dr. Stephen

Magie, Little Rock; Dr. Brenda Powell, Hot Springs; Ms. Gennice Woods, Little Rock, Medical Student Representative; and Dr. L. Jane McKinnon, Fort Smith, Chairman.

This Reference Committee carefully reviewed and discussed the following reports printed in the March issue of *The Journal of the Arkansas Medical Society*: AMS Benefits, Inc., Report by Dr. Charles Logan, Chairman of the Board; AMS Medical Student Section Report by Mr. Richard White, President; CME Accreditation Committee Report by Dr. Steven Strode, Chairman; Medical Education Foundation for Arkansas Report by Dr. Martin Eisele, President; and Young Physicians' Leadership Task Force Report by Dr. Anna Redman, Chairman.

Reference Committee #1 recommends that these reports be filed for information.

This Reference Committee gave careful consideration to the following items and requested that they be considered separately:

Arkansas Department of Health Report

Dr. Sandra Nichols, Director

This Reference Committee recommends that a letter of commendation be sent to Dr. Nichols and employees of the Arkansas Department of Health recognizing their superb efforts and accomplishments this past year in protecting and promoting the health of Arkansans. This Reference Committee recommends that the report of the Arkansas Department of Health be filed for information.

Arkansas State Medical Board Report

Peggy Pryor Cryer, Executive Secretary

This Reference Committee noted with dismay that the actions and recommendations from last year's House of Delegates were largely ignored and unheeded. While this Reference Committee supports the Arkansas State Medical Board in its efforts to adopt rules and regulations regarding intractable benign non-malignant pain, we condemn Regulation 2(6) as writ-

ten. Regulation 2(6) places physicians in an untenable position. It exposes physicians to unnecessary medical/legal liability and creates an overwhelming administration and documentation burden, serving to discourage the appropriate treatment of patients with chronic pain. The financial burden to patients will potentially increase, and patients may not be able to access appropriate providers. This Reference Committee recommends that the report of the Arkansas State Medical Board be filed for information.

Resolution #1: Student/Physician Mentoring Program introduced by the AMS Medical Student Section

WHEREAS, medical training is a unique educational experience that can only be fully appreciated by those who have pursued the same endeavor; and

WHEREAS, opportunities for interaction between student and physician members of the Arkansas Medical Society are limited outside the academic centers; and

WHEREAS, the private practice of medicine has concerns that are not presented in a teaching hospital; and

WHEREAS, despite few formal studies directly addressing this issue, it is widely accepted among members of the health care community that mentoring relationships provide a unique and beneficial resource to young professionals developing the characteristics and qualities integral to their profession¹; therefore be it

RESOLVED, that the Arkansas Medical Society Council in cooperation with the Medical Student Section establish a mentoring program designed to provide individual interaction between physician members and UAMS medical students.

Reference:

1. Barondess, J. "On Mentoring" *J R Soc Med* 1997; 90:347-349

This reference committee recommends this resolution be adopted.

Resolution #2: Medical Student Voting Privileges on the AMS Council introduced by the AMS Medical Student Section

WHEREAS, the Arkansas Medical Society represents the needs and interests of future, as well as, present physicians of Arkansas; and

WHEREAS, the Arkansas Medical Society has a

vested interest in developing leadership skills and involvement among medical students; and

WHEREAS, active participation by students is vital to the future of organized medicine and the unity of the medical profession; and

WHEREAS, the Arkansas Medical Society formed a Medical Student Section in 1984 giving medical students a voting delegate to the Arkansas Medical Society House of Delegates; and

WHEREAS, medical students in Arkansas have a genuine interest in the decisions and activities that bear directly on their future practices; therefore be it

RESOLVED, that the Arkansas Medical Society support expansion of the Arkansas Medical Society Council to include one (1) student representative as a voting member; and be it further

RESOLVED, that any amendments to the bylaws that are necessary to implement this provisions be drafted and presented for discussion at the next meeting of the Arkansas Medical Society House of Delegates.

This Reference Committee discussed whether residents should be added to the resolution. Since the Resident Physician Section does not have an organized leadership it was felt that now is not the appropriate time. We would hope that once the Resident Physician Section becomes more organized, they would



Members of Reference Committee #1

submit a similar resolution to this body. This Reference Committee whole-heartedly supports this resolution. This Reference Committee recommends this resolution be adopted.

This concludes the report of Reference Committee #1. The Chairman wishes to thank those who appeared before the Committee, members of the Committee, and David Wroten and Nadine Gentry of the AMS staff for their assistance.

Will I Have Enough? Isn't That The Question?



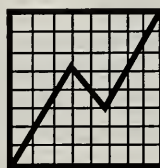
(Clockwise): left to right: Jim Strawn, Stephen Chaffin, Bill Smith

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Reference Committee #2

Kimberly Garner, M.D., Chairman

Reference Committee #2 was composed of: Dr. Harold Brown,

Paragould; Dr. Sue Chambers, Harrison; Dr. Steven Strode, Little Rock; Dr. Maxann Ferguson, Little Rock, Resident Representative; Mr. Don Norwood, Little Rock, Medical Student Representative; and Dr. Kimberly Garner, Pine Bluff, Chairman.

This Reference Committee carefully reviewed and discussed the following reports printed in the March issue of *The Journal of the Arkansas Medical Society*: AMS 1998 Budget Report by Dr. Robert F. McCrary, Jr., 1997 Chairman; Annual Session Committee Report by Dr. William Dedman, Chairman; Arkansas Health Care Access Foundation, Inc., Report by Dr. Simmie Armstrong, Jr., President; AMS Executive Vice President Report by Ken LaMastus, CAE, Executive Vice President; Pulaski County Medical Society Report by Fred Reddoch, Executive Director; and Report of the AMS Council by Dr. Gerald Stolz, Jr., Chairman.

Reference Committee #2 recommends that these reports be filed for information.

This Reference Committee gave careful consideration to the following items and requested that they be considered separately:

The Physicians' Health Committee and Arkansas Medical Foundation Report Dr. Joe L. Martindale, Medical Director

Dr. Martindale appeared before this Reference Committee and presented an update on the Physicians' Health Committee's activities. This Reference Committee recommends that the report of the Physicians' Health Committee and Arkansas Medical Foundation be filed for information and that Dr. Martindale and his committee and staff be sent letters of commendation for their dedicated service to the physicians of Arkansas.

Resolution #3: Documentation Guidelines for E/M Codes introduced by

Allan S. Pirnique, M.D., El Dorado

WHEREAS, the Health Care Financing Adminis-

tration has published new documentation guidelines for coding of evaluation and management services provided to Medicare beneficiaries; and

WHEREAS, these new guidelines have created frustration and anxiety among the physician community because they are both overly burdensome and clinically incomplete; and

WHEREAS, the difficulty in complying with the guidelines raises the specter of unwarranted fraud and abuse penalties if they are not followed fully and explicitly; and

WHEREAS, the guidelines, as currently written, distract the physician from his or her primary responsibility of placing the patient's problems first and foremost; therefore be it

RESOLVED, that the Arkansas Medical Society oppose implementation of the guidelines as currently written; and be it further

RESOLVED, that the AMS contact the American Medical Association, the Health Care Financing Administration, and our Congressional Delegation encouraging them to take the necessary steps to revise these guidelines in a manner that is neither administratively burdensome or clinically intrusive.

This Reference Committee notes that the American Medical Association is involved in a nationwide process to revise the guidelines, and we support those efforts.

This Reference Committee recommends that this resolution be adopted, that Arkansas Medical Society members contact the Society Staff with suggestions and comments, and that Arkansas Medical Society members contact their Congressmen and Senators about this issue.

Resolution #4: Medical Student Representation on the AMS Committees introduced by the AMS Medical Student Section

WHEREAS, the Arkansas Medical Society, in order to improve the standard of medicine, supports the education of medical students by providing both classroom education funding and opportunities for

practical experiences; and

WHEREAS, the Medical Student Section provides and opportunity for medical students to become actively involved in the Arkansas Medical Society while learning the role of organized medicine; and

WHEREAS, students actively involved in AMS activities as students are more likely to remain active in the Arkansas Medical Society as physicians, ultimately increasing the strength of the Society; and

WHEREAS, the Medical Student Section is an active component of the Arkansas Medical Society, comprising 11% of its membership¹; and

WHEREAS, the issues discussed and addressed by the Arkansas Medical Society are relevant to MSS members as students and as future physicians; and

WHEREAS, a student elected by the Medical Student Section currently serves in the AMS House of Delegates and a student appointed by the MSS Executive Board serves on each AMS-HOD Reference Committee; and

WHEREAS, the current Bylaws of the American Medical Association calls for a student member to serve on each of its councils² and on the Board of Trustees³; therefore be it

RESOLVED, that a member of the AMS Medical Student Section, as recommended by the MSS Executive Board, serve on each of the standing and ad-hoc committees of the Arkansas Medical Society, possessing all the rights and privileges delegated to that position.

References:

1. *AMS and AMA Yearly Membership Comparison Report as presented at AMS Council meeting November 12, 1997*
2. *AMA Bylaws Section B-6.1023, B-6.2022, B-6.3022, B-405, B-6.502, B-6.6023, and B-6.8022*
3. *AMA Bylaws Section B-5.10*

This Reference Committee welcomes the increased participation and involvement of medical students and considered whether or not the resolution should include residents. However, currently the Resident Physician Section is inactive. We would hope that once the Resident Physician Section becomes more involved they would put forth a resolution requesting resident representation.

This Reference Committee recommends that this resolution be adopted.

Resolution #5: Medical Student Representation to the AMS Foundations and Subsidiaries introduced by the AMS Medical Student Section

WHEREAS, in order to improve the standard of medicine in Arkansas and represent the interests of its members, the Arkansas Medical Society has established various foundations and subsidiaries; and



Members of Reference Committee #2

WHEREAS, the activities of the AMS affiliated foundations and subsidiaries (AMS Benefits, Inc.; Arkansas Health Care Access Foundation, Inc.; Arkansas Medical Foundation; and Medical Education Foundation for Arkansas) depend upon the active involvement and support of a broad spectrum of AMS membership; and

WHEREAS, one goal of the Medical Student Section is to educate its members on the contributions of organized medicine through active participation in AMS activities; and

WHEREAS, the activities of the AMS affiliated foundations and subsidiaries impact MSS members directly as both students and as future physicians; and

WHEREAS, the Medical Student Section does not currently have a formal mechanism providing representation within these AMS affiliated foundations and subsidiaries; therefore be it

RESOLVED, that the AMS House of Delegates directs the AMS Council to draft a letter to the boards of all affiliated foundations and subsidiaries encouraging them to develop a mechanism for student representation within their individual organizations.

This Reference Committee recommends that this resolution be adopted and that each student who attended the Arkansas Medical Society Annual Meeting be sent a letter of appreciation for their attendance and support of this meeting. In addition, a copy of this letter should be sent to the Dean of the University of Arkansas College of Medicine.

This concludes the report of Reference Committee #2. The Chairman wishes to thank those who appeared before the Committee, members of the Committee, and David Wroten and Tina Wade of the AMS staff for their assistance.

Report of the Council

April 2-3, 1998

The Council of the Arkansas Medical Society met at 2:00 p.m., on Thursday, April 2, 1998 and at 7:30 a.m., on Friday, April 3, 1998, at the Excelsior Hotel in Little Rock in conjunction with the Arkansas Medical Society annual meeting.

Members present on Thursday, April 2, 1998 were Drs. Mike Berumen, Joseph Beck, Lloyd Bess, Carlton Chambers, John Crenshaw, William Dedman, C. Reid Henry, Jr., Anthony Hui, Anthony Johnson, William Jones, Lloyd Langston, Charles Logan, John Lytle, Robert McCrary, Michael Moody, Mayne Parker, Brenda Powell, Anna Redman, Edward Saer, Joe Stallings, Gerald Stolz, Jan Turley, Steve Thomason, Parthasarathy Vasudevan, Oliver Wallace, Dwight Williams, Harold Wilson, John Wilson, Michael Young, and Dennis Yelvington. Other AMS members present were Drs. John Burge, John Hestir, Larry Lawson, Morton Wilson, Roger Cagle, Leonus Shedd, Joe Martindale; Ms. Karen McNiece, President, AMS Medical Student Section; Ken LaMastus, Kay Waldo, David Wroten, and Lynn Zeno, AMS staff; and Mike Mitchell, AMS General Counsel. Dr. Percy Wootton, President of the American Medical Association, attended the meeting.

Members present on Friday, April 3, 1998, were Drs. David Barclay, Mike Berumen, Lloyd Bess, Carlton Chambers, John Crenshaw, William Dedman, Anthony Hui, Anthony Johnson, Joe Jones, William Jones, Lloyd Langston, Charles Logan, John Lytle, Michael Moody, Mayne Parker, Brenda Powell, Anna Redman, Joe Stallings, Gerald Stolz, Jan Turley, Steve Thomason, Parthasarathy Vasudevan, Oliver Wallace, Dwight Williams, Harold Wilson, John Wilson, Michael Young, and Dennis Yelvington. Other AMS members present were Drs. John Hestir, Albert Koenig, and Joe Norton; Ms. Karen McNiece, President, AMS Medical Student Section; Ken LaMastus, Kay Waldo, David Wroten, and Lynn Zeno, AMS staff; and Mike Mitchell, AMS General Counsel.

The following business was received and transacted:

1. The Council approved the minutes of the following meetings: November 23, 1997, Council meeting, the January 28, 1998, Executive Committee meeting, and the February 25, 1998, Executive Committee meeting.

2. The Council approved the following dues exemption requests:

Arkansas County: John M. Hestir, Life

Baxter County: Helga E. Chock, Affiliate

Benton County: Patrick K. Keane, Affiliate; Billy J. Puckett, Life

Clark County: James L. Lowry, Affiliate

Craighead/Poinsett Counties: Larry E. Mahon, Emeritus; Gary S. Sapiro, Affiliate

Crawford County: Edward Doyle, Affiliate; A. Lawrence Travis, Life

Crittenden County: Chester W. Peeples, Jr., Life

Garland County: William R. Mashburn, Affiliate; D. Bluford Stough, III, Life

Hot Spring County: Russell W. Cobb, Life

Jefferson County: William J. James, Life

Lawrence County: Joe E. Hughes, Emeritus

Little River County: Norman W. Peacock, Jr., Affiliate

Pope County: Lynn Haines, Affiliate; John W. King, Emeritus; Douglas H. Lowrey, Life

Pulaski County: James H. Abraham, Emeritus; John E. Allen, Jr., Affiliate; Melvin L. Belknap, Emeritus; William B. Bishop, Emeritus; Donald G. Browning, Affiliate; Charles R. Fielder, Life; Thomas M. Fletcher, Life; George M. Goza, Jr., Affiliate; Robert Hardin, Affiliate; J. Harry Hayes, Jr., Affiliate; Harold G. Hutson, Emeritus; B. Richard Johnson, Emeritus; J. Floyd Kyser, Emeritus; Ben M. Lincoln, Life; David A. Miles, Life; Raymond P. Miller, Sr., Emeritus; Bruce E. Schratz, Emeritus
Saline County: James Bethel, Life; Donald L. Viner, Emeritus

Sebastian County: Peter J. Irwin, Emeritus; William F. Turner, Emeritus

St. Francis County: Fun Hung Fong, Emeritus

Washington County: Wade W. Burnside, Jr., Emeritus; Joseph H. McAlister, Affiliate; Charles P. Sisco, Emeritus

Union County: David B. Fraser, Life

Direct Membership: Patricia A. Lang, Life; C. Wayne Starnes, Affiliate

3. Dr. Gerald Stolz discussed appointments for the Medicare Carrier Advisory Committee regarding terms and eligibility to serve more than one term. Ken LaMastus explained there are no requirements

other than the Council had coordinated this committee with the Medical Services Review Committee (MSRC) which has been abolished. Dr. William Jones asked the appointment representing dermatology be postponed until after their upcoming annual specialty meeting. Discussion was held regarding receiving recommendations from specialty societies for appointments to the Medicare Carrier Advisory Committee and, upon motion, the Council voted to continue to ask specialty societies to recommend physicians to serve on the Medicare Carrier Advisory Committee. If nominations are not received within thirty days prior to the annual meeting, the Council will act on the appointments.

4. The Council made the following appointments:
Budget Committee: Joe Stallings, Jonesboro
Journal Editorial Board: reappointed Alex Finkbeiner, Little Rock, representing UAMS and reappointed Jerry Byrum, Little Rock, representing pediatrics
Medical Education Foundation for Arkansas: reappointed James Kyser, Little Rock
Committee on Position Papers: Joseph Beck, Little Rock; reappointed David Davis, Fayetteville and Michael Young, Prescott
Arkansas Medical Foundation (the following nominations were made): reappoint Larry Lawson of Paragould to Position 41 and Joanna Seibert of Little Rock to Position 42
Young Physicians Task Force: David Murphy, Russellville; Jane McKinnon, Fort Smith; and Kimberly Garner, Pine Bluff
Medicare Carrier Advisory Committee: Kelsy Caplinger, Little Rock, representing allergy; E. Taliaferro Warren, Hot Springs, representing cardiovascular diseases and cardiovascular surgery; Bob Cogburn, Little Rock, representing hematology and oncology; Robert Borg, Hot Springs, representing otolaryngology; Kevin Hurlbut, Fayetteville, representing physical medicine and rehabilitation; Rudy Van Hemert, Little Rock, representing radiology; Loverd Peacock, Jonesboro, representing therapeutic radiology; and Zachary Mason, Little Rock, representing neurosurgery.
5. Dr. Percy Wootton, President of the American Medical Association, greeted the Council and presented an AMA Membership Award to Dr. Gerald Stolz. This is the nineteenth year the Arkansas Medical Society has surpassed its previous year's membership.
6. Mr. Mike Mitchell, AMS General Counsel, gave

an update on the Patient Protection Act lawsuit. A decision is currently pending in the Eighth Circuit Court and an opinion may be rendered by mid-summer.

7. Dr. Gerald Stolz announced the fall meeting will be November 21-22, 1998, at the Red Apple Inn in Heber Springs.
8. Mr. Ken LaMastus presented the membership and budget reports for the period ending February 28, 1998. Mr. LaMastus reported membership was down slightly. This will be reviewed by the staff to determine the reason the numbers are down.
9. Mr. Ken LaMastus discussed the Arkansas Medical Society audit for 1997. Mr. LaMastus reported the Arkansas Medical Society is in sound financial condition with over \$1.2 million in cash and reserves.
10. Mr. Ken LaMastus reported on plans to refinance the Arkansas Medical Society Building. Mr. LaMastus, recommended paying approximately \$250,000 on the loan. Dr. Charles Logan suggested the Arkansas Medical Society consider paying the note down and for the Society to discontinue rent payments and let the other tenant's rent make the mortgage payment. Discussion was held regarding the amount to be paid on the loan with no set amount being determined. Upon motion the Council voted to pursue refinancing of the building and to present the information to the Executive Committee for a decision.
11. Dr. Joe Stallings discussed the recent tragedy in Jonesboro and the outstanding job performed by the physicians and nurses in the emergency room. He thanked everyone for their prayers and support.
12. Mr. Ken LaMastus discussed the MEFFA audit and reported on the MEFFA board meeting held on Thursday. He reported the MEFFA bylaws will be reviewed to consider changes in who can receive contributions.
13. Dr. Charles Logan thanked everyone for their support. He also announced the new Arkansas Medical Society benefit allowing members to make purchases from the Society using Visa or MasterCard on everything except dues.
14. Dr. Michael Moody reported on the Arkansas State Medical Board Regulation 2(6), prescribing con-

trolled substances on a long-term basis and the concerns of many primary care physicians regarding this regulation. Several Council members expressed their concern regarding the Medical Board's lack of attention in reviewing physicians' complaints regarding this issue.

Upon motion, the Council voted to appoint an ad hoc committee made up of physicians with a vested interest in this issue to come with recommendations on how we can best change this regulation and the Executive Committee investigate any possible actions that we may take to expedite correcting the problem.

Upon motion the Council voted in favor of the following amendment made by Dr. John Crenshaw: The Executive Committee shall have the authority to act on behalf of the Council to implement the decisions made by the ad hoc committee and the Executive Committee.

15. Dr. John Crenshaw discussed The Medical Pro-



1998-1999 Council of the Arkansas Medical Society

tective Company, a malpractice insurance company that is pulling their business out of Arkansas. They are encouraging physicians to move their coverage to other carriers. Lynn Zeno suggested everyone visit the exhibitors which include several representatives of malpractice carriers.

16. Dr. William Jones informed the Council that at least 75% of the federal money that comes to Arkansas for HIV goes for patient services.

17. Dr. Anna Redman asked for the second congressional district to submit three names for the Arkansas State Medical Board position. Council members discussed the process by which nominees for the Arkansas State Board of Health and the Arkansas State Medical Board are determined and how there was a need for improvement in meeting and developing the list of nominees. Dr. Stolz will ask the Bylaws Committee to review the process.

There being no further business the meeting adjourned.



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Farewell Address

Medical Society

Awareness 1997-1998

Charles Logan, M.D.
President 1997-1998

1997-1998 has been a very progressive and productive year for the Arkansas Medical Society. I have enjoyed the opportunity you have given me to serve as your President during this past year. I deeply appreciate the support I have received from the membership. The staff has been extremely helpful in keeping the Medical Society focused and on track in many arenas as you will learn from our discussion today. I appreciate their dedication and the wonderful job they do for the physicians of Arkansas. Usually the "off years" when the Legislature is not in session are less productive and less busy, but this year has certainly been an exception.

We started the year by trying to increase our membership's awareness of medical ethics and ethical behavior and the emphasis was placed on the importance of the physician-patient relationship. Little did I know that my concerns in the ethical arena would spill over into many aspects of our Arkansas lifestyle. Our elected officials, Representatives and State Senators are being asked to evaluate their actions and behavior from an ethical perspective. Ethics, inappropriate behavior and poor decisions have resulted in new leadership at the AMA. A completely new Ethics Department at the AMA has been well received and is extremely busy addressing the moral and ethical standards that are front page and television news. Even the Ethics Committee of Arkansas has come under scrutiny with a battle between the Committee and our Governor. We are all aware of the ethical dilemmas that face our country with the recent focus on Washington, D.C. leadership.

As your President, I spoke to the Freshmen medical students on ethical behavior at the Annual White Coat Ceremony where the Arkansas Medical Society

is a major sponsor. As one of the key speakers for the evening, my remarks were directed with emphasis on ethical behavior and the physician-patient relationship. Will this fury of ethical concern kindle a societal ethical renewal? Perhaps there will be a significant improvement in the ethical pattern of politics, business and even medicine. Our patients and our fellow physicians are increasingly concerned with the business side of medicine and its lack of sensitivity for the patient's need and their failure to gain access to timely and quality medical care. In Washington today there are several bills in Congress that are being considered to curb the lack of reasonable and ethical behavior by HMO's in the medical marketplace. On a recent visit to Washington, we learned a "lite" version of these bills is expected to become law during the current session of Congress.

Today, I come before you to report on the "State of the Arkansas Medical Society." Let me say, unequivocally that we are strong in numbers, high in spirit and determined in purpose. The Arkansas Medical Society continues to grow and has exceeded 4,000 members strong for the first time in our history. Our leadership and staff are dedicated and extremely knowledgeable about the issues that face medicine today. I must take this opportunity to thank the entire staff for their fervent and loyal support during my tenure as your President. If you would permit, I would like to review some of the key activities of our staff members. The activities and achievements during the past year clearly explain why Arkansas physicians have put their trust in the Arkansas Medical Society.

Following each Legislative session, there is always a proliferation of meetings necessary to draft rules and regulations pertaining to the acts that were passed.

Your Executive Committee and staff are deeply involved in this process where medical practice may be affected. In addition, the staff immediately starts preparing Legislation for the next session of the general assembly which meets every other year. Among the groups that the society has been working with are: 1) Coalition for Mental Health Parity, 2) Arkansas Cancer Coalition, 3) Arkansas Diabetes Coalition, and 4) Arkansas Highway Safety Coalition. The staff works closely with various state regulatory agencies on an ongoing basis.

David Wroten serves on the Governor's Medicaid Advisory Committee and works closely with the Department of Human Services. He was selected to attend the "Innovations in Government Awards" presentation in Washington recognizing "Medicaid Connect Care." The award recognized "Medicaid Connect Care" as one of the 10 best programs created by a Government entity. David Wroten played a vital role in developing this program

David Wroten and our President-Elect, Mike Moody serve on the Health Department Task Force to draft new regulations for HMO's that offer coverage in Arkansas. Hopefully this effort will provide some relief for current problems and prevent many more of the onerous aspects of HMO insurance programs and perhaps avoid the horror stories that we have heard from our colleagues in other parts of the country. David is working with the State Insurance Department to remedy balanced billing problems currently experienced between providers and insurance carriers. The staff and officers have always enjoyed a good relationship with the State Medical Board and the State Health Department. They often serve as a conduit between Arkansas physicians and these two important Government entities. Your Executive Committee has met face to face regularly with the Executive Director of The Arkansas Health Department.

The staff and officers of the Arkansas Medical Society are always available to speak to county and medical specialty society meetings and they are looked upon as informed spokesmen in the medical community. Rarely does a week go by that the Medical Society is not contacted by the media for comments regarding health care developments. Presentations to groups such as AARP, local civic organization, medical students and testimony before Legislative committees have been ongoing this year on a regular basis. The Medical Society has been actively involved in the recruiting of new medical professional liability insurance companies in our state. Our efforts in this area assure Arkansas physicians a variety of quality insurance carriers and help maintain a competitive market place.

Kay Waldo, our outstanding Director of Administrative Services, has had a banner year in offering educational and practice management seminars. Over 500

physicians and clinic employees have attended the Arkansas Medical Society sponsored programs. The programs that have been offered include: 1) Documentation Guidelines for E/M Coding, 2) CPT and Other Coding Seminars, 3) Internet Training for Physicians and Spouses, 4) Audit Proofing your Practice, and 5) Advanced Strategies for Managed Care. As a new member service, you may now use your Visa or MasterCard to pay for seminars or medical society publications. Dues may not be paid by credit card.

The CME Accreditation Committee of the Arkansas Medical Society surveys and accredits sponsors of continued medical education such as your hospitals. During the past year, 6 hospitals have undergone on-site reaccreditation surveys. In October, the AMS hosted a special conference in Eureka Springs for CME sponsors. This is planned to become an annual event.

We co-hosted the Southeast CME Symposium in New Orleans along with the Medical Societies of Alabama, Louisiana and Mississippi. Kay Waldo and David Wroten are responsible for this most important medical society function.

Governmental affairs activity and oversight of State and National Legislation continue even in the off Legislative years. Our astute and highly respected Director, Lynn Zeno, continues to closely monitor the "Legislative Waterfront." I often find Lynn Zeno at interim committee meetings at the Capitol or working in-depth with our state Legislators or our Washington Congressional Delegation on issues of medical concern. Mr. Zeno is a highly respected member of the AMA's Legislative Advisory Committee and is frequently called upon to make presentations at National Legislative Programs. During this past year, several of your officers including your President have traveled with Mr. Zeno to Washington for Congressional visits concerning critical issues on the Congressional agenda. Lynn Zeno serves on the State Insurance Commissioner's Life and Health Insurance Task Force and is Chairman of the Arkansas Health Care Providers Forum. The Forum is an organization representing the various health care providers throughout the state of Arkansas. Laura Harrison, the Special Projects Coordinator, assists Mr. Lynn Zeno with daily operations of the Department of Governmental Affairs.

On the legal front, business has been brisk during the past year. The Medical Society commitment to the Any Willing Provider Legislation remains viable and strong in Arkansas. This spring Mike Mitchell and David Ivers, our very competent legal team, have presented oral arguments before the 8th Circuit Federal Court of Appeals in St. Louis where legal action by insurance concerns against the Any Willing Provider Legislation has continued. The Arkansas Medical Society has expended almost a quarter of a million dollars fighting for your patients' right to choose the pro-

vider of their choice. Although other provider groups have made financial contributions towards the legal expenses, the AMS has continued to shoulder the lion's share of the expenses in this important legal battle. An answer from the 8th Circuit Court is expected within the next two to three months from our legal staff.

Three very important and special publications were developed for our membership during the year. 1) The Arkansas Medical Society published the first edition of "Physicians Legal Guide." Over 500 copies have been sold and new orders arrive daily. This comprehensive publication answers legal questions that arise in physician practices from abandonment to medical records to vital statistics. This guide is an invaluable resource for medical practice and the business of medicine. 2) In October, the Arkansas Medical Society published copies of the new documentation "Guidelines for Evaluation in Management Coding." These were professionally printed and mailed to every Arkansas Medical Society member at society expense. 3) The Arkansas Medical Society commissioned a study of the new Blue Cross/Blue Shield fee schedule and mailed a specialty specific impact analysis to physicians across the state.

The Arkansas Medical Society made a significant financial commitment to establish a Managed Care Network in Arkansas in 1993. AMCO Independent organizations were established in over 20 different geographical areas in Arkansas. Each organization was established with its own Governance and Board. The Arkansas Medical Society initially established an AMCO Management Company which then contracted with each individual AMCO for services such as contract negotiations with business and credentialing of physicians. Because of conflicts of interest that developed among the membership over contract availability in certain geographical areas, the officers and Council of the Arkansas Medical Society made a decision to sell the Management Company. A Management Company (The Harvard Group) in Tennessee with Vanderbilt University connections purchased the AMCO Management Company, but each AMCO remained independent to develop a nonexclusive contract with the new Management Company or anyone in the marketplace. Subsequently, Vanderbilt has assumed full operations of the Management Company. The Medical Society through an initial down payment and legal arbitration with the new managers at Vanderbilt this fall recovered over 100% of our financial commitment. With this commitment, we have greatly raised the Managed Care awareness of our physicians throughout the state. Arkansas physicians have legal organizations in existence to contract and negotiate with Managed Care. I consider this quite a success story for our medical society when placed in

comparison with HMO efforts by medical societies in other states. AMCO in Arkansas is now 22 independent organizations strong and they have over 50,000 covered lives. In some areas of the state, such as Helena, we find AMCO leading the pack while in other areas such as Little Rock where competition is quite vigorous, the AMCO presence is developing more slowly.

As your President, and with the support of the staff, we have established a web page on the Internet for our Medical Society. Each staff member is now available through E-mail. We have had 4 seminars to help physicians and their wives establish E-mail addresses and learn to communicate via the Internet. In short, as we continue to expand our Internet Web Page, we are preparing a state of the art communications system for our medical society for the new millennium. Mr. Ken LaMastus has been very helpful and supportive in establishing the web page. It is safe to say that it is still a work in progress, but it is up and running and can be reached at www.arkmed.org.

At the helm of this Arkansas Medical Society is our Executive Vice President, Ken LaMastus, with business savvy, a conservative, but progressive agenda and a strong insight with common sense for what is morally and ethically right for Arkansas physicians. Ken LaMastus is personally involved with the Physicians Health Foundation and the Medical Education Foundation of Arkansas (MEFFA). Ken has been instrumental along with your Executive Committee in developing a soon to be announced program which will allow physicians to contribute to a tax free annuity program which will accrue substantial benefits, not only for participating physicians, but also long-term benefits for our Medical Education Foundation. The Physician Health Committee has achieved a major goal this year in obtaining 501-C-3 tax exempt status. During this past year, Mr. LaMastus has investigated the possibilities of refinancing our building during a period of low mortgage rates. Further information concerning the annuity program and the refinancing of the building will be brought to the Council and the membership as the terms of these issues are finalized for presentation.

Our Medical Society is recognized as a leader in the association field. I would like to point out three areas of recognition which have been received during the past year.

1) The Arkansas Society of Association Executives presented the AMS with the ASAE Excellence in Communication Award recognizing *The Journal of the Arkansas Medical Society*. Tina Wade along with other staff has done a wonderful job with the in-house publication of our AMS Journal.

2) MED-PAC, our Political Action Committee received an award from the AMA for leading the nation

in PAC membership growth. Dr. Scott Ferguson accepted this award at the opening session of the House of Delegates.

3) The AMA recognized the AMS for increasing membership in the AMA. We will be presented the AMA Membership Award at the AMA's annual meeting in Chicago this June.

The 122nd Annual Session is a culmination of hard work by the entire medical staff. It puts physicians in touch with leading vendors of medical and financial related services and feature presentation by national experts in areas of most concern to our membership. It provides the members and medical students an opportunity to interact with the Arkansas Medical Society officers and councilors and based on my report of the State of the Arkansas Medical Society today, I think everyone can see why Arkansas physicians should continue to put their trust in our state medical society.

As I close, I would like to once again, re-emphasize the importance of ethical behavior. I remain concerned about the integrity of the profession, not the individual physician, but the ethics of the profession. From a moral standpoint, we have never all been virtuous, however, unified as physicians across national boundaries, ethical concepts have bound us together and identified us as a profession. When I was in medical school, the Hippocratic ethic was a foundation of professional ethics. Through this oath, the foundation was never questioned. We were excited by change and accepted change. We had a moral understanding and we felt scientific information could be safely woven into the patient-physician ethic. A stage of metamorphosis has subsequently occurred challenging the ethical foundation of our profession. What has changed in the physician-patient relationship? Modern ethisism might reconstruct the relationship to the level of a contract and a commodity transaction. Today there is often a secular rather than a religious approach. The ethics of the community have changed. It is now every man for himself. The fidelity of trust may turn to distrust when there are conflicts of interest. Confidentiality to date has fortunately been retained, but even this is challenged. Some would say, you don't have to be a "good" person to be a good doctor and that it is an occupation, not a special profession. Challenging our profession today is economics vs. ethics as seen in the Health Care Reform expressed in the moral dilemmas of managed care and the ethics of the marketplace. Are we really a commodity? Managed Care has divided the loyalty. Job security is no longer present as doctors are deselected in the marketplace. Under what circumstances will we not participate?

Integrity vs. societal demand is also an additional new challenge with micro management by families in demands for treatment. I say integrity and trust are important. The physician must be the final pathway. We must rebuild the ethic for the next century. We must preserve the physician-patient relationship. The

individual is truly a patient, not a client, not a consumer. A case manager cannot cure. The ill are anxious, fearful and exploitable. There is an increased responsibility of the physician. The responsibility is seen in the physician's power, skill, knowledge to help and trust that exist to provide a service to the patient. The physician invites trust when he asks, "What is your problem?" The moral complexity one on one is inescapable. Certain virtues are necessary to being a physician. The notion of character, no matter what the ethical principle, no matter what the ethical policy, no matter what the legal policy, the patient depends on you as the physician to be the kind of good "person" you are at 3:00 a.m. when no one else is watching. That is the moment of truth. We must be faithful to the trust and act benevolent by on behalf of the patient. We must act with self effacement and not self-interest. Integrity, compassion, intellectual honesty and competence remain the hallmarks of our profession. In philosophy and medicine today, we must defend the ethical foundation of medical morality.



Dr. Moody presents Dr. Logan with a framed cover of the June 1997 issue of The Journal of the Arkansas Medical Society.



Dr. Logan shakes hands with "The President" portrayed by Damian Mason, a President Clinton impersonator, of Indiana.



Alliance Presidential Address

Lyda Campbell
AMSA 1998-1999 President

Greetings to each of you!

First, let me thank Johnnie Amonette for being here. It is such an honor and a privilege to have the National President in our midst - and especially one who is really an Arkansan and resides near to us.

To all the Past-Presidents, thank you for your mighty efforts over the years. Be advised that each of you will be hearing from me this next year.

To the 1998-1999 Board Members, whether elected or appointed, it is good to see so many of you. Thank you for your continued interest in the Arkansas Medical Society Alliance. I look to each of you to inspire me with new ideas.

When I said to myself, "Speech" - two things popped into my head that I resolved with as much speed as possible in order that I might get down to the real issues and not grapple with self-doubt. I heard a comedian say years ago, "Don't tell me about your doubts; I've got doubts of my own. Tell me something you believe in!" I certainly have lots of self-doubt - not knowing the answers. My mode of operation is to put them aside and get on with a realistic plan of action. In this instance, it was a speech.

First, I was relieved that our National President resides 75 miles from my former home, Blytheville. If she were from up state New York, I might have been in trouble. People from other geographic locations seem to have problems with the speech patterns of people from Mississippi County. The first self doubt was quickly alleviated.

Second, whether to wear homemade or store bought! One of my real hobbies has been designing and constructing clothing. That was resolved because fabric stores are disappearing, and I had no worthy fabric or plans to go to some large city for the purpose of shopping. Since I had no fabric, I got rid of that

issue and voted on store bought.

My dues have been paid in this organization for many years. I remember being Secretary of the Jefferson County Auxiliary in about 1960. And, although we are continually told that we must plan to justify our Alliance - tell people "what is in it for them" - "what they can gain from being a member." I know this is on intellectual level and try to formulate ideas, plans and goals for recruitment and retention. On an emotional level, I really do not personally understand it. There has always been much peer support, loyalty and affirmation from other physician spouses. To me, it is like a well or a waterfall - the personal benefits are available for those who avail themselves of membership and choose to participate. One of our members in Pulaski County says we in the Auxiliary are a family - and even though we did not choose one another, there is certainly more that unites us than divides us.

If I can encourage any of you who have not attended, please let me share with you some of the benefits that can be derived from attending a Confluence Session at the Drake Hotel in Chicago. It is real leadership training that is targeted toward an already accomplished population. Participants are told they are already leaders - their presence demonstrates that. Confluence is really to sharpen skills. Recently Jim and I attended an all day motivational seminar here in Little Rock. I came away with a greater respect for the Confluence experience. If you have not been to Confluence, consider it! It will be worth the effort. You could even stay a day longer and go to Elizabeth Arden's Miracle morning make over. I have participated in both and let me testify to you that although Elizabeth Arden was enjoyable, Confluence gave me something that enhanced my self-image more.

The Leadership Confluence II was roughly divided

into two main themes. First were the seminars on personal leadership skills - Speech, Writing, Developing Transferable Leadership and Conflict Resolution. The legislative updates are always helpful as the lawyers from Washington keep participants better informed.

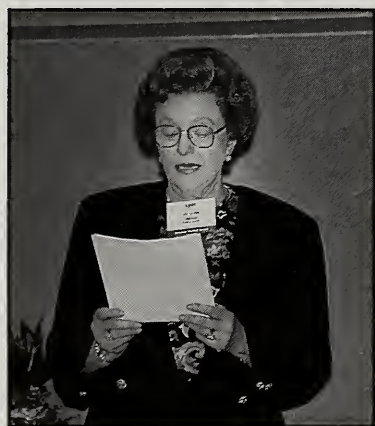
The issue that does not fit a category in my opinion is the Medical Marriage session attended by all of us. The seminar was titled, "The Super Couple Syndrome" presented by Wayne and Mary Stolie. They are co-authors of the book, *Medical Marriage: A Couple's Survival Guide*. The presentation is applicable to each of us as physician spouses. It would be wonderful if everyone could experience these people's seminar.

The second large group of presentations has to do with the large thrust of the American Medical Society Alliance - which is violence as a public health issue. The educational seminars cover media violence, domestic violence and children's access to sex and violence on the Internet. My personal favorite is a young physician, Dr. John P. May, who is Assistant Medical Director of the Central Detention Facility in Washington, D.C. His area of interest is in trauma - primarily gunshot wounds. He says there is a public health crisis in the population of black males ages 15 to 24 who are the most likely to suffer. However, I heard a radio spot out of Chicago that stated a child is shot in America

every 10 minutes. We have all heard the statistics - the billions of expense dollars to the government for incarceration, hospitalization of victims and care for the disabled. Dr. May has hope that in time the hand gun violence can be reduced by public education and society's awareness. His theory is similar to the present legal suits about the tobacco companies. He says it has taken 30 years but obviously tobacco use is not glamorized today. Also, the government has become involved due to public opinion. At Cook County Hospital, Dr. May and others instituted an after-care program for the gunshot victims encouraging better citizenship and building self-esteem. His conclusion was when he related that an inmate came to him for treatment for a cold or respiratory ailment. The young man said, "My nose is so stopped up I cannot breath - I couldn't even smell a dead body." The young doctor spoke to the young person about smelling flowers but as Dr. May knew, that was not his reality.

Let us look forward to an exciting year of plans, activities and projects. I must thank my husband for offering his support. Due to family illness, I had second thoughts. I spoke of resigning. He volunteered to bail me out if necessary - so I am here. He has never let me down yet.

Thank you.



Lyda Campbell, 1998-99 AMS Alliance President



Barbara Moody, 1997-98 AMS Alliance President



The Past President's Club



Mary Ann Stallings, 1994-95 AMS Alliance President

Fifty Year Club



The Fifty Year Club is composed of physicians who, for the past fifty years, have loyally and effectively served the community and, by skill and devotion to high ideals, upheld and maintained the standards of the medical profession. The above photographed members of the Fifty Year Club met at the Excelsior Hotel and Statehouse Convention Center in Little Rock on April 2, 1998.

Physicians who were inducted into the Fifty Year Club this year are: Walter C. Barnes, Jr., M.D., Texarkana, Texas; Frank M. Bauer, Jr., M.D., Little Rock; L. J. Patrick Bell, M.D., Helena; A. Stuart Fitzhugh, M.D., Little Rock; A. Tharp Gillespie, M.D., Little Rock; Joe B. Hall, M.D., Fayetteville; Byron E. Holmes, M.D., Lonoke; Joseph H. McAlister, M.D., Huntsville; Elsey L. Milner, M.D., Little Rock; James M. Post, M.D., Fort Smith; Benedict F. Pupsta, M.D., Clarendon; William V. Relyea, M.D., Cherokee Village; Frank M. Sipes, M.D., Little Rock; and Thomas N. Stern, M.D., Memphis, Tennessee.

1998 Grand Prize Winners



Roger Cagle, M.D., of Paragould, was the grand prize winner of a \$1,000 Worldwide Travel gift certificate for a trip to the destination of his choice.



Jamie D. Brown of National Park Medical Center won the exhibitor grand prize of \$100.



Dr. Kelsy J. Caplinger, III, presents the Shuffield award to Amy L. Rossi.

1998 Arkansas Medical Society Shuffield Award

*Presented Friday, April 3, 1998
to
Amy L. Rossi*

Amy L. Rossi, L.C.S.W., executive director of Arkansas Advocates for Children and Families, a state based non-profit child advocacy organization, was presented with the 1998 Shuffield Award by the Arkansas Medical Society during the 122nd Annual Session at the Excelsior Hotel and Statehouse Convention Center on Friday, April 3, 1998.

The Shuffield Award is given each year to recognize a non-physician who has made significant contributions to their community in the area of health care. The award is named in honor of the late Drs. Joe and Elvin Shuffield, a father and son team from Little Rock, who devoted their lives to the quality of health care in our state.

Rossi received the Shuffield Award for her long and distinguished history of service to the community, particularly regarding children and family issues. Her actions over many years have effected the lives of innumerable Arkansas children and families. Most recently, she worked vigorously to secure gubernatorial and legislative support to expand health coverage of uninsured children through the ARKids First Program.

Rossi has been with Arkansas Advocates for Children and Families since 1980 and executive director since 1988. She received her undergraduate degree in Sociology from the University of Arkansas at Little Rock and her Masters of Science in Social Work from the University of Tennessee.

For the past twenty years, Rossi has taken leadership roles on numerous government and private task forces, committees and commissions charged with serving children on a variety of issues. Notable activities include serving as a member of the Governor's Commission on Juvenile Justice which designed a new juvenile court system for Arkansas and serving as special master in two class action lawsuits against the state's department of human services regarding services to children in their custody.

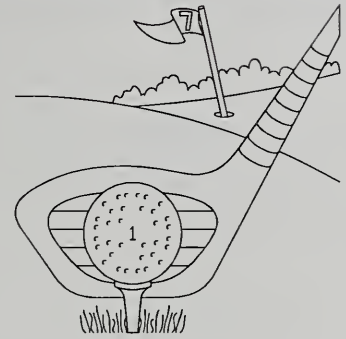
Rossi is a delegate to the President's Summit for America's Future, and an advisor to the Junior League of Little Rock and the Arkansas PTA. She is involved in Leadership Greater Little Rock and the Arkansas Women's Leadership Forum. She serves on the board of directors for the National Conference of Christian and Jews' Our Town program, a project to improve race relations in the community, and is a long time member of the Interfaith Council's Social Action Committee.

Legislatively, Rossi is routinely invited to provide testimony before the legislature and has worked closely with legislators to effect legislative changes on public policies affecting children and families. She consults with the Governor and administrators of state agencies on programs for families. Additional significant achievements include expansions in child care opportunities for working families, improvements in the child welfare system and a school breakfast mandate.

Rossi is recipient of the 1997 "Social Worker of the Year" award presented by the National Association of Social Workers, Arkansas Chapter; the 1997 Distinguished Service Award by the Arkansas Hospital Association; and the 1997 Appreciation Award by the March of Dimes.

Dr. Harold "Bud" Purdy Memorial Golf Tournament

On Thursday, April 2, 1998,
Annual Session began on the golf course
with the mingling of many
doctors, exhibitors and special guests.
Here are some miscellaneous photographs
of tournament participants.



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Annual Session Pics

Mystery Dinner Theater

Top left: Nikki Lawson, AMS Alliance past president (far left), and Joe Stallings, M.D., (far right) play along with the actors.

Top right: An actor plays out his role among the crowd.

Bottom left: An actor mingles with Annual Session participants while playing his part in the mystery.

Bottom right: Dr. Henker gets a hug from one of the actors.



Banquet Special Guest

Top left: Annual session participants speculate about the strange men in black and the secret, special guest who has yet to arrive.

Top right: The special guest, "The President," portrayed by Damian Mason, arrives amid his secret service clan.

Bottom left: "The Presidents" pose together; Dr. Michael N. Moody, 1998-99 AMS President, Barbara Moody, 1997-98 AMS Alliance President and Damian Mason as "The President."

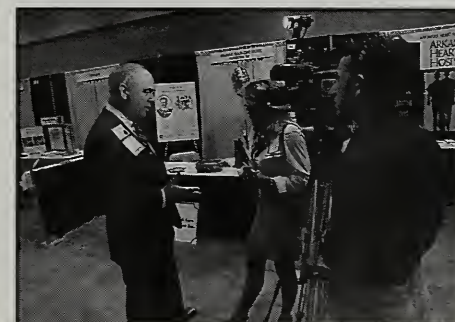
Bottom right: Dr. and Mrs. Stallings give a thumbs up with "The President."



Other Scenes

Left: Rick Cole and Karen McNiece, Vice President and President of the AMS Medical Student Section, talk with Dr. Percy Wootton, AMA President.

Right: Dr. William Jones takes time out to talk to local media.



1998 Annual Session Sponsors



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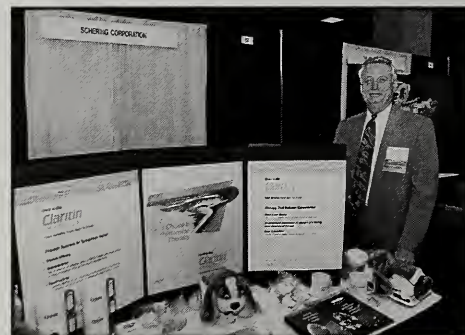
National Park Medical Center



NationsBank



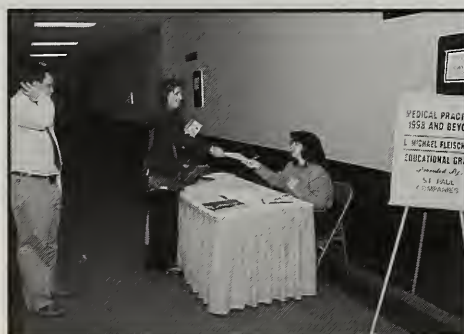
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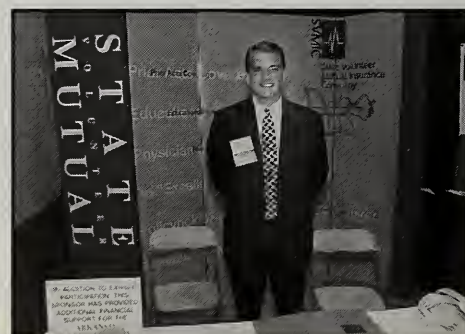
Schering Corporation



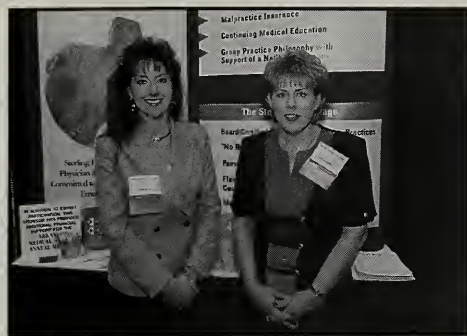
Southern Medical Association



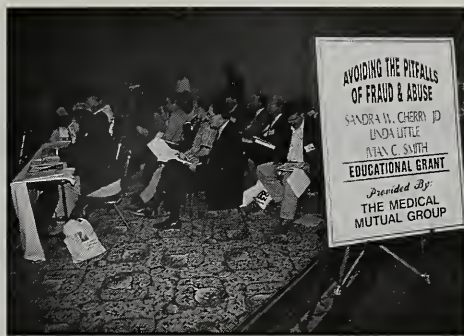
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1998 Arkansas Medical Society Annual Session Sponsors

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- American Investors Life Insurance Company (President's Reception)*
- Arkansas Blue Cross Blue Shield (Dinner Theatre)*
- First Commercial Bank (Continental Breakfast)*
- Freemyer Collection System (Educational Grant for the Shuffield Lecture)*
- MedPlus Leasing Company (Dinner Theatre)*
- National Park Medical Center (Afternoon Break)*
- NationsBank (Welcome Reception)*
- Pfizer, Inc. (Afternoon Break)*
- Schering Corporation (Golf Tournament)*
- Southern Medical Association (Hospitality Hour)*
- St. Paul Companies (Educational Grant for the Seminar for Young Physicians)*
- State Volunteer Mutual Insurance Company (Session Portfolios)*
- Sterling Healthcare Group (Program Ad)*
- The Medical Mutual Group (Educational Grant for the Second Feature Session)*

1998 Annual Session Exhibitors

Thank you for being a part of our 1998 convention!

A United Buyers Network
Air Purification Inc., Alpine Products
Alliance Homecare Equipment
Alpha Home Recovery
AMS Benefits, Inc.
Ancil Lea Consulting, Inc.
Arkansas Army National Guard Medical Recruiting Team
Arkansas Blue Cross Blue Shield
Arkansas Caduceus Club
Arkansas Capital Corporation
Arkansas Center for Sleep Medicine
Arkansas Foundation for Medical Care, Inc.
Arkansas Health Care Access Foundation
Arkansas Heart Hospital
Arkansas Managed Care Organization
Arkansas Medicaid Deferred Compensation Program
Arkansas Medical Group Management
Arkansas Medical Laboratory
Arkansas Society of Medical Assistants
Astra Merck
Autoflex Leasing
Baptist Health
Bayer/Miles
Beverly Health & Rehabilitation
Charter Behavioral Health System
Disability Determination for Social Security
Doctors Insurance Reciprocal
Eli Lilly and Company
First Commercial Bank
Freemyer Collection System
Gaudin & Associates, Inc.
Horizon Mental Health Management
Horne CPA Group
Hospice Home Care/Kaleidoscope Kids
Hutchinson/Ibrah Financial Services, Inc.
IMS Medacom Arkansas
Janssen Pharmaceutica, Inc.
Key Pharmaceuticals

Medicaid Managed Care Services
Medical Merchandising, Inc.
Medical Office Management Systems
MedPlus Leasing Company
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National Park Medical Center
Novartis Pharmaceutical
Olsten Health Services
Orthotic & Prosthetic Providers, Inc.
Parke-Davis
Pfizer Labs
Powers
Pratt Pharmaceuticals
Professional Consulting Services
Ramsey, Krug, Farrell & Lensing
Rebsamen Regional Medical Center
RehabCare Group
Roche Laboratories
Roerig Laboratories
Sanofi Pharmaceuticals, Inc.
Schering Corporation
Snell Prosthetic & Orthotic Laboratory
Southwest Capital Management
St. Paul Companies
St. Vincent Health System
State Volunteer Mutual Insurance
Sterling Healthcare Group
Tap Pharmaceuticals, Inc.
The Doctors' Company
The Medical Mutual Group
Timber Ridge Ranch NeuroRehabilitation Cnt.
UAMS Medical Center
United Medical, Inc.
US Army Health Care Recruiting
White County Medical Center

In Memoriam

The following members of the Arkansas Medical Society were remembered during the 1998 AMS Annual Session.

Howard Armstrong, MD, Little Rock

Joseph A. Buchman, MD, Little Rock

J. Roger Clark, MD, Little Rock

T. Murray Ferguson, MD, West Memphis

Ross E. Fowler, MD, Harrison

William E. Jennings, MD, Rogers

Frank C. Maguire Jr., MD, Augusta

Edward N. McCollum, MD, Decatur

F. Lamar McMillin Sr., MD, Vicksburg, Mississippi

Don Meador, MD, Charleston

John H. Miller, MD, Camden

Arthur F. Moore, MD, Fayetteville

John L. Ruff, MD, Magnolia

William W. Scott, MD, Pocahontas

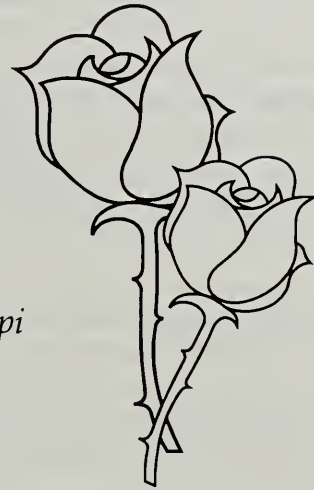
Daniel J. Scroggie, MD, Harrison

H. Wendell Ward, MD, Fayetteville

Oba B. White, MD, Little Rock

Garland D. Wisdom, MD, Jonesboro

George H. Wright, MD, Hope





Kamil Hanna, M.D.*
Tamim Antakli, M.D.**
Michal Savcendo, M.D.**
J. David Talley, M.D.*

Acute Aortic Insufficiency

Acute aortic regurgitation may be due to infective endocarditis on a congenitally abnormal (bicuspid) or with acquired disease (rheumatic) of the aortic valve. It may also be seen with traumatic injury to the aorta or valvular structure itself. We recently participated in the care of a patient with acute aortic regurgitation secondary to infective endocarditis of a prosthetic aortic valve and review the pathophysiology and treatment options of this terrifying yet reversible condition.

Patient Report

History. Patient is a 36 year-old male who had previously undergone bioprosthetic aortic valve replacement on two separate occasions (1975 and 1985). He had a history of rheumatic heart disease. On this occasion, he presented with severe and progressive shortness of breath and fever of three days duration. He had received an antibiotic several days earlier for the presumptive diagnosis of pneumonia.

Physical examination. The patient was ill and in severe respiratory distress. He had a temperature of 102° F, blood pressure 110/50 mmHg, pulse 125 beats/minute and the respiratory rate was 45 breaths/minute. Crackles were present half way up his lung fields. Cardiovascular examination showed a harsh diastolic murmur at the apex, a holosystolic murmur at the right upper parasternal border, and a S3 gallop.

Laboratory examination. The white blood cell count was 20k/mm³ and the arterial blood gases showed a respiratory alkalosis and hypoxia (pH 7.52, paO₂ 43mmHg, and pCO₂ of 25mmHg). The lungs were nearly "whited out" on the chest x-ray. A two-dimensional echocardiogram showed a flail left aortic cusp with an echo dense vegetative-like structure (Figure 1), severe aortic regurgitation and global

hypokinesis with an estimated ejection fraction of <20%. The patient was promptly intubated with the addition of inotropic support, diuretics, and antibiotics.

After hemodynamic stabilization, he underwent a third aortic valve replacement with a St. Jude mechanical prosthesis. Intra-operatively, a gram stain showed white blood cells on the prosthetic valve. He did well in the post-operative period and the blood cultures showed no growth. A two-dimensional echo-cardiogram preformed prior to hospital discharge showed only trace aortic regurgitation (Figure 2). He was discharged home on warfarin and antibiotics to be taken for six weeks. He has now returned to work and resumed normal activities.

Most likely, the patient had pneumonia with bacteremia leading to acute destruction of the bioprosthetic valve. The negative cultures were probably due to antecedent antibiotics.

Discussion

Two large epidemiological studies by Griffin et and by van der Meer note prosthetic valve endocarditis (PVE) comprises 10-20% of all cases of infective endocarditis.^{1,2} The incidence of prosthetic valve endocarditis is 1.4 - 3.1% at twelve months and 3.2-5.7% at five years after valve replacement. Prosthetic valve endocarditis that occurs more than sixty days after surgery is likely community acquired. Mechanical prosthesis is at greatest risk of infection within the first year after placement, but bioprosthetic valves are more susceptible after twelve months.³ Streptococci are the common culprit accounting for one-third of prosthetic valve endocarditis occurring two months or more after surgery. "Culture-negative" prosthetic valve endocarditis occurs in 10% of the cases.⁴ The intracardiac pathology of bioprosthetic valve endocarditis includes invasive leaflet destruction, valve obstruction, and annulus invasion.

The clinical features of prosthetic valve endocarditis

* Drs. Hanna and Talley are with the Division of Cardiology, Department of Internal Medicine at UAMS.

** Drs. Antakli and Savcendo are with the Division of Cardiothoracic Surgery, Department of Surgery at UAMS.

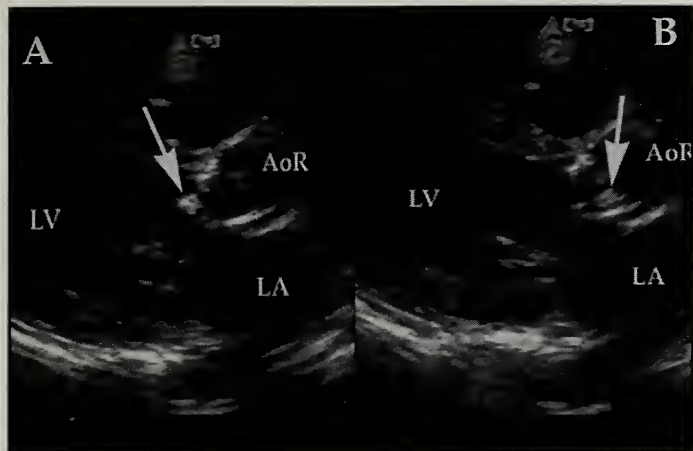


Figure 1: Parasternal long-axis two-dimensional echocardiogram showing an oscillating mass on the sclerotic aortic valve. Panel A: diastolic frame (the mitral valve is open) with the mass prolapsing into the left ventricle. Panel B: systolic frame (the mitral valve is closed) with the mass moving into the aortic outflow tract. Abbreviations: AoR = aortic root, LA = atrium, LV = left ventricle.

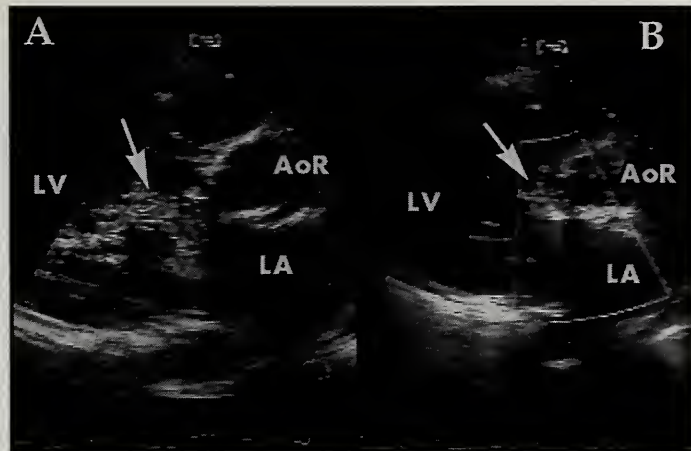


Figure 2: Color-flow two-dimensional echocardiogram in the parasternal long-axis view. Panel A: prior to repeat aortic valve replacement there is a large regurgitant jet from the aorta into the left ventricle in diastole. Panel B: post operatively there was only a trace of aortic regurgitation. Abbreviations: AoR = aortic root, LA = atrium, LV = left ventricle.

include fever and congestive heart failure (40%). Cerebrovascular complications are seen in approximately 30% and peripheral embolization in 15%.⁵ Surgical intervention is recommended for patients who do not respond to empirical antimicrobial therapy and those with severe heart failure due to aortic regurgitation secondary to leaflet destruction (as in our patient).

References:

1. Griffin MR, Wilson WR, Edwards WD et al. N Infective endocarditis: Olmstead county, Minnesota, 1950 through 1981. JAMA 1985;254:1199-1202.
2. van der Meer JT, Thompson J, Valkenburg HA, Michel MF: Epidemiology of bacterial endocarditis in the Netherlands. Patient characteristics. Arch Intern Med 1992;152:1863-1868.
3. Ivert TSA, Dismukes WE, Cobbs CG et al. Prosthetic valve endocarditis. Circulation 1984;69:223-232.
4. Karchmer AW, Gibbons, GW. Infections of prosthetic heart valves and vascular grafts. In Bisno AL, Wavogel FA (eds): Infections associated with indwelling devices. 2nd ed. Washington, D.C., American Society for Microbiology, 1994, p 213.
5. Tunkel AR, Kaye D. Endocarditis with negative blood cultures. N Engl J Med 1992;326:1215-1217.

Let Us Hear From You!

**You can now E-mail AMS
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Main address: ams@arkmed.org
Ken LaMastus: kenL@arkmed.org
Lynn Zeno: zeno@arkmed.org
David Wroten: davidl@arkmed.org
Kay Waldo: kaywl@arkmed.org

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<http://www.arkmed.org>





State Health Watch

Information provided by the Arkansas Department of Health, Division of Epidemiology

Group A Streptococcal Infections; One Year as A Notifiable Disease

Among the conditions which the CDC has termed "Emerging Infectious Diseases," is included invasive disease caused by Group A Streptococci (GAS). These conditions have been covered in the popular press at various times in recent years, being referred to there as "the killer bug that ate my face," "flesh-eating virus," etc. The CDC has recognized that perhaps due to improved reporting of diseases generally, there appears to be an increase in serious infections caused by GAS. Invasive infections include Streptococcal Toxic Shock Syndrome, pneumonia, bacteremia in association with cutaneous infection, deep soft-tissue infection (necrotizing fasciitis or myositis), meningitis, peritonitis, osteomyelitis, septic arthritis, postpartum sepsis, neonatal sepsis and nonfocal bacteremia.

As of October 1996, the list of notifiable diseases and conditions for Arkansas was amended to include invasive GAS infections. Prior to that time, there was no systemic recording of these infections. Consequently, the occasional invasive infection reported pro-

vided no sure basis for determining an incidence rate or other epidemiologic statistic.

Five cases of GAS were reported to the Division of Epidemiology during 1997, including one death, from septicemia which followed cellulitis. Two other bacteremias were reported, one accompanying pneumonia, and the other without any focal infection reported. One case of septic arthritis was reported. There were no reports of necrotizing fasciitis. All hospitals and clinical laboratories in the state were renotified early in 1998 of the fact that GAS invasive infections are reportable in Arkansas. As of this time, eight invasive GAS infections have been reported. One necrotizing fasciitis case, four septic arthritis cases, and four bacteremia have been reported.

For more information, or for a listing of notifiable diseases and conditions in Arkansas, please call the Arkansas Department of Health, Division of Epidemiology at (501)661-2893 during normal business hours.

Reported Cases of Selected Diseases in Arkansas Profile for March 1998

The three-month delay in the disease profile for a given month is designed to minimize any changes that may occur due to the effects of late reporting. The numbers in the table reflect the actual disease onset date, if known, rather than the date the disease was reported.

For a listing of reportable diseases in Arkansas, call the Arkansas Department of Health, Division of Epidemiology, at (501) 661-2893.

Disease Name	Total Reported Cases YTD 1998	Total Reported Cases YTD 1997	Total Reported Cases YTD 1996	Total Reported Cases 1997*	Total Reported Cases 1996
Campylobacteriosis	26	33	30	175	241
Giardiasis	23	49	30	220	182
Salmonellosis	32	30	19	446	455
Shigellosis	34	38	51	273	176
Hepatitis A	14	78	149	221	500
Hepatitis B	21	22	32	98	93
Hepatitis C	0	2	2	5	7
Meningococcal Infections	10	18	15	38	35
Viral Meningitis	3	7	8	25	38
Ehrlichiosis	1	0	0	22	7
Lyme Disease	1	3	4	26	27
Rocky Mtn Spotted Fever	4	0	4	29	22
Tularemia	0	2	2	24	24
Measles	0	0	0	0	0
Mumps	0	0	0	1	1
Gonorrhea	1081	1183	1210	4388	5050
Syphilis	53	127	246	394	706
Pertussis	7	2	0	60	14
Tuberculosis	19	29	32	200	225

NR Not reportable

*1997 data (except STD) are provisional

New Members

DEQUEEN

Gonzalez, Floyd, Pediatrics. Medical Education, University De Monterrey, Faculty De Med., Monterrey, Nuevo Leon, Mexico, 1986. Internship, Instituto Mexicano del Seguro Social, 1988. Residency, University of Oklahoma, 1995.

HOT SPRINGS

Ketcher, Brenda G., Gastroenterology. Medical Education, UAMS, 1991. Internship/Residency, UAMS, 1992/1994. Board certified.

JONESBORO

Patel, Suresh T., Cardiology. Medical Education, University of Nairobi, Kenya, 1983. Internship, NYANZA General Hospital, 1987. Residency, Brookdale Hospital Medical Center, Brooklyn, New York, 1991. Board certified.

JUNCTION CITY

Ferreri, Roger Nicholas, General Medicine. Medical Education, Case Western Reserve University School of Medicine, Cleveland, Ohio, 1980. Internship/Residency, The Cleveland Clinic, 1981/1984.

LITTLE ROCK

Clardy, William Floyd, Public Health/Pediatrics/Aerospace Medicine. Medical Education, UAMS, 1973. Internship, Wilford Hall USAF Medical Center, San Antonio, Texas, 1974. Residency, UAMS, 1977, and USAF School of Aerospace Medicine, San Antonio, Texas, 1984. Board certified.

Cummins, David T., Anesthesiology/Pain Management. Medical Education, University of Alabama

School of Medicine, Birmingham, 1985. Internship, Baptist Medical Center, Birmingham, 1986. Residency, Richland Memorial Hospital, Columbia, South Carolina, 1989. Board certified.

De Bruyn, Van H., Cardiovascular Disease. Medical Education, University of Iowa College of Medicine, Iowa City, 1990. Internship/Residency, University of Minnesota, 1991/1993. Board certified.

Mego, David M., Cardiovascular Disease. Medical Education, Harvard Medical School, Boston, Massachusetts, 1986. Internship/Residency, Brooke Army Medical Center, 1987/1989. Board certified.

Warmack, Asa Mack, Anesthesiology. Medical Education, UAMS, 1979. Internship/Residency, UAMS, 1980/1989. Board certified.

White, Faber Allen, Jr., Anesthesiology. Medical Education, UAMS, 1974. Internship/Residency, UAMS, 1975/1978. Board certified.

PARKIN

Sajjad, Rehan, Internal Medicine. Medical Education, Nishtar Medical College, Multan, Pakistan, 1990. Internship/Residency, State University of New York at Buffalo, 1995/1997. Board certified.

VAN BUREN

Samman, Zaki A., Hematology/Oncology. Medical Education, Damascus University, Syria, 1985. Internship, Atlantic City Medical Center, 1991. Residency, Englewood Hospital & Medical Center, Mt. Sinai, 1993. Board certified.

STUDENTS

Jamal Ziad Abdin
Brian L. Harlan

In Memoriam

Claude F. Peters, M.D.

Dr. Claude F. Peters of Malvern died Sunday, April 19, 1998. He was 82. He is survived by his wife, Altha Elizabeth; his daughter, Pat Walters; son-in-law, Bill Walters; grandson, Allan Walters and granddaughter, Tracy Walters; his daughter, Jan Wood; son-in-law, Don Wood; granddaughters Erin Wood and Lauren Wood; a granddaughter, Lisa Renee Peters, daughter of Dr. Peters' son, Stephen F. Peters, who was killed while serving with the Special Forces in Vietnam in 1967; and his sister, Suzanne Schroeder.

Things To Come

June 23, 1998 - July 5, 1998

American Medicine in a Critical Perspective - A 12-Day Study Cruise on ms Rotterdam VI. Cruising the Norwegian Fjords to North Cape with featured speaker Dr. C. Everett Koop. Sponsored jointly by the Florida Medical Association and Continuing Education, Inc. For more information, call 1-800-926-3775.

June 26 - 28, 1998

12th Annual Frontiers in Endourology - *Retrograde Intrarenal Surgery, Ureteroscopy, Stents and Other Minimally Invasive Techniques: Nonincisional Access to the Entire Urinary Tract.* Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

July 17 - 18, 1998

Clinical Allergy for the Practicing Physician. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

July 26 - 29, 1998

The Seventh National Alzheimer's Disease Education Conference: *Creating Opportunities, Making Connections.* Indianapolis Convention Center, Indianapolis, Indiana. Sponsored by the National Alzheimer's Association and the Central Indiana Chapter of the Association. For more information, call 312-335-5790.

October 1 - 3, 1998

Contemporary Cardiothoracic Surgery. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

October 14 - 18, 1998

1998 Infectious Disease Board Review: *A Comprehensive Review for Board Preparation.* Ritz-Carlton Hotel, Tysons Corner, McLean, Virginia. For more information, call the Center for Bio-Medical Communication, Inc., at 201-385-8080, extension 26.

October 15 - 16, 1998

24th Annual Symposium on Obstetrics & Gynecology. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

October 17, 1998

Urinary Incontinence and Female Urology. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

October 30 - 31, 1998

3rd Annual Fingers to Toes: *Comprehensive Orthopaedic Review Course for Primary Care Physicians.* Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

December 12, 1998

Contemporary Management of Acute Myocardial Infarction. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

Arkansas Foundation for Medical Care 1998 Quarterly Video Conferences:

Video conferences, Third Thursday of the month, once a quarter. Time: 12 noon to 1:30 p.m. Dates: August 20 and November 19. Location: UAMS education building/AHECs and Rural Hospital Affiliates.

For more information,
contact Patricia Williams or Cindy Jones
at 501-649-8501, ext. 203.

Keeping Up

June 20, 1998

Charles William Rasco II Symposium on Colorectal Cancer - UAMS Walton Auditorium. Sponsored by UAMS College of Medicine. For more information, call (501) 661-7962.

June 27-28, 1998

Annual Meeting of the Arkansas Chapter of the American College of Obstetrics and Gynecology - Lake Hamilton Resort, Hot Springs. Sponsored by UAMS College of Medicine. For more information, call (501) 661-7962.

August 25, 1998

Annual Meeting of the Arkansas Society of Perenteral and Enteral Nutrition - UAMS Walton Auditorium. Sponsored by UAMS College of Medicine. For more information, call (501) 661-7962.

Recurring Education Programs

The following organizations are accredited by the Arkansas Medical Society to sponsor continuing medical education for physicians. The organizations named designate these continuing medical education activities for the credit hours specified in Category 1 of the Physician's Recognition Award of the American Medical Association.

FAYETTEVILLE-VA MEDICAL CENTER

Medical Grand Rounds/General Medical Topics, Thursdays, 12:00 noon, Auditorium, Bldg. 3

FAYETTEVILLE-WASHINGTON REGIONAL MEDICAL CENTER

Chest Conference, 1st Wednesday of every month, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Primary Care Conferences, every Monday, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Tumor Conference, every Thursday, 7:30 - 8:30 a.m., WRMC, Baker Conference Center, no fee, breakfast provided

HARRISON-NORTH ARKANSAS MEDICAL CENTER

Cancer Conference, 4th Thursday, 12:00 noon, Conference Room

LITTLE ROCK-ST. VINCENT INFIRMARY MEDICAL CENTER

Cancer Conferences, Thursdays, 12:00 noon, Southwestern Bell/Arkla room. Lunch provided.
General Surgery Grand Rounds, 1st Thursday, 7:00 a.m. Southwestern Bell/Arkla Room. Light breakfast provided.
Interdisciplinary AIDS Conference, 2nd Friday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Journal Club, Tuesdays, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Pulmonary Conference, 4th Wednesday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.

LITTLE ROCK-BAPTIST MEDICAL CENTER

Breast Conference, 3rd Thursday, 7:00 a.m., J.A. Gilbreath Conference Center
Gastroenterology/Surgery Journal Club, dates vary, AR Gastroenterology Memorial Medical Plaza, Suite 3A. Call 501- 202-2673 or 202-3888 for more information.
G.I. Problems Conference, 3rd Tuesday every other month beginning in April, 6:30 to 8:00 p.m., Shuffield Auditorium
Grand Rounds Conference, Wednesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Multidisciplinary Trauma Conference, 3rd Thursday each month, 5:00 to 6:00 p.m., location varies, call 501-202-2673 or 202-1406.
Pulmonary Conference, Tuesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Sleep Disorders Case Conference, Twice monthly, 12:00 noon. Call BMC ext. 2673 for dates and location. Lunch provided.

MOUNTAIN HOME-BAXTER COUNTY REGIONAL HOSPITAL

Lecture Series, 3rd Tuesday, 6:30 p.m., Education Building
Tumor Conference, Tuesdays, 12:00 noon, Carti Boardroom

The University of Arkansas College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor the following continuing medical education activities for physicians. The Office of Continuing Medical Education designates that these activities meet the criteria for credit hours in category 1 toward the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

LITTLE ROCK-ARKANSAS CHILDREN'S HOSPITAL

Faculty Resident Seminar, 3rd Thursday, 12:00 noon, Sturgis Auditorium
Genetics Conference, Wednesdays, 1:30 p.m., Conference Room, Springer Building
Infectious Disease Conference, 2nd Wednesday, 12:00 noon, 2nd Floor Classroom

Pediatric Grand Rounds, Tuesdays, 8:00 a.m., Sturgis Bldg., Auditorium
Pediatric Neuroscience Conference, 1st Thursday, 8:00 a.m., 2nd Floor Classroom
Pediatric Pharmacology Conference, 5th Wednesday, 12:00 noon, 2nd Classroom
Pediatric Research Conference, 1st Thursday, 12:00 noon, 2nd Floor Classroom

LITTLE ROCK-UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

ACRC Multi-Disciplinary Cancer Conference (Tumor Board), Wednesdays, 12:00 noon, ACRC 2nd floor Conference Room.
Anesthesia Grand Rounds/M&M Conference, Tuesdays, 6:00 a.m., UAMS Education III Bldg., Room 0219.
Autopsy Pathology Conference, Wednesdays, 8:30 a.m., VAMC-LR Autopsy Room.
Cardiology-Cardiovascular & Thoracic Surgery Conference, Wednesdays, 11:45 a.m., UAMS, Shorey Bldg., room 3S/06
Cardiology Grand Rounds, 2nd & 4th Mondays, 4:00 p.m., UAMS Shorey Bldg., 3S/06
Cardiology Morning Report, every morning, 7:30 a.m., UAMS, Shorey Bldg. room 3S/07
Cardiothoracic Surgery M&M Conference, 2nd Saturday each month, 8:00 a.m., UAMS, Shorey Bldg. room 2S/08
CARTI/Searcy Tumor Board Conference, 2nd Wednesday, 12:30 p.m., CARTI Searcy, 405 Rodgers Drive, Searcy.
Centers for Mental Healthcare Research Conference, 1st & 3rd Wednesday each month, 4:00 p.m., UAMS, Child Study Ctr.
CORE Research Conference, 2nd & 4th Wednesday each month, 4:00 p.m., UAMS, Child Study Ctr., 1st floor auditorium
Endocrinology Grand Rounds, Fridays, 12:00 noon, ACRC Bldg., Sam Walton Auditorium, 10th floor
Gastroenterology Grand Rounds, Thursdays, 4:00 p.m., UAMS Hospital, room 3D29 (1st Thurs. at ACH)
Gastroenterology Pathology Conference, 4:00 p.m., 1st Tuesday each month, UAMS Hospital
GI/Radiology Conference, Tuesdays, 8:00 a.m., UAMS Hospital, room 3D29
In-Vitro Fertilization Case Conference, 2nd & 4th Wednesdays each month, 11:00 a.m., Freeway Medical Tower, Suite 502 Conf. rm
Medical/Surgical Chest Conference, each Monday, 4:00 p.m., UAMS Hospital, room M1/293
Medicine Grand Rounds, Thursdays, 12:00 noon, UAMS Education II Bldg., room 0131
Medicine Research Conference, one Wednesday each month, 4:30 p.m. UAMS Education II Bldg. room 0131A
Neuropathology Conference, 2nd Wednesday each month, 4:00 p.m., AR State Crime Lab, Medical Examiner's Office
Neurosurgery, Neuroradiology & Neuropathology Case Presentations, Thursdays, 4:00 p.m., UAMS Hospital OB/GYN Fetal Boards, 2nd Fridays, 8:00 a.m., ACH Sturgis Bldg.
OB/GYN Grand Rounds, Wednesdays, 7:45 a.m., UAMS Education II Bldg., room 0141A
Ophthalmology Problem Case Conference, Thursdays, 4:00 p.m., UAMS Jones Eye Institute, 2 credit hours
Orthopaedic Basic Science Conference, Tuesdays, 7:30 a.m., UAMS Education II Bldg., room B/107
Orthopaedic Bibliography Conference, Tuesdays, Jan. - Oct., 7:30 a.m., UAMS Education II Bldg.
Orthopaedic Fracture Conference, Tuesdays, 9:00 a.m., UAMS Education II Bldg., room B/107
Orthopaedic Grand Rounds, Tuesdays, 10:00 a.m., UAMS Education II Bldg., room B/107
Otolaryngology Grand Rounds, 2nd Saturday each month, 9:00 a.m., UAMS Biomedical Research Bldg., room 205
Otolaryngology M&M Conference, each Monday, 5:30 p.m., UAMS Otolaryngology Conf. room
Perinatal Care Grand Rounds, every Tuesday, 12:15 p.m., BMC, 2nd floor Conf. room
Psychiatry Grand Rounds, Fridays, 11:00 a.m., UAMS Child Study Center Auditorium
Surgery Grand Rounds, Tuesdays, 8:00 a.m., ACRC Betsy Blass Conf.
Surgery Morbidity & Mortality Conference, Tuesdays, 7:00 a.m., ACRC Betsy Blass conference room, 2nd floor
NLRVA Geriatric/Medicine Grand Rounds, Thursdays, 8:00 a.m., VAMC-NLR, Bldg 68, room 130
VA Medical Service Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D109
VA Pathology-Hematology/Oncology-Radiology Patient Problem Conference, Thursdays, 8:15 a.m., VAMC-LR, room 2E142
VA Psychiatry Difficult Case Conference, 4th Monday, 12:00 noon, VAMC-NLR, Mental Health Clinic
VA Lung Cancer Conference, Thursdays, 3:00 p.m., VAMC-LR, room 2E142
VA Medical Service Teaching Conference, Thursdays, 8:00 a.m., VAMC-NLR, Bldg. 68 room 130
VA Medicine-Pathology Conference, Tuesday, 2:00 p.m., VAMC-LR, room 2D109
VA Medicine Resident's Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D08
VA Physical Medicine & Rehab Grand Rounds, 4th Friday, 11:30 a.m., VAMC-NLR Bldg. 68, room 118 or Baptist Rehab Institute
VA Surgery Grand Rounds, Thursdays, 12:45 p.m., VAMC-LR, room 2D109, 1.25 credit hours
VA Topics in Rehabilitation Medicine Conference, 2nd, 3rd, & 4th Thursdays, 8:00 a.m., VAMC-NLR Bldg. 68, room 118
VA Weekly Cancer Conference, Monday, 3:00 p.m., VAMC-LR, room 2E-142
White County Memorial Hospital Medical Staff Program, once monthly, dates & times vary, White County Memorial Hospital, Searcy

EL DORADO-AHEC

Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., Warner Brown Campus, 6th floor Conf. Rm.
Behavioral Sciences Conference, 1st & 4th Friday, 12:15 p.m., AHEC - South Arkansas
Chest Conference, 3rd Wednesday, 12:15 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.
Dermatology Conference, 1st Tuesdays and 1st Thursdays, AHEC - South Arkansas
GYN Conference, 2nd Friday, 12:15 p.m., AHEC-South Arkansas
Internal Medicine Conference, 1st, 2nd & 4th Wednesday, 12:15 p.m., AHEC-South Arkansas
Noon Lecture Series, 2nd & 4th Thursday, 12:00 noon, Union Medical Campus, Conf. Rm. #3. Lunch provided.
Pathology Conference, 2nd Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5. Lunch provided.
Pediatric Conference, 3rd Friday, 12:15 p.m., AHEC - South Arkansas
Pediatric Case Presentation, 3rd Tuesday, 3rd Friday, AHEC - South Arkansas

Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., AHEC - South Arkansas (Interactive video)
 Pathology Conference, 2nd Tuesday, 12:15 p.m., AHEC - South Arkansas
 Obstetrics-Gynecology Conference, 4th Thursday, 12:15 p.m., AHEC - South Arkansas
 Surgical Conference, 1st, 2nd & 3rd Monday, 12:15 p.m., AHEC - South Arkansas
 Tumor Clinic, 4th Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5, Lunch provided.
 VA Hematology/Oncology Conference, Thursdays, 8:15 a.m., VAMC-LR Pathology conference room 2E142

FAYETTEVILLE-AHEC NORTHWEST

AHEC Teaching Conferences, Tuesdays & Wednesdays, 12:00 noon, AHEC Classroom
 AHEC Teaching Conferences, Fridays, 12:00 noon, AHEC Classroom
 AHEC Teaching Conferences, Thursdays, 7:30 a.m., AHEC Classroom
 Medical/Surgical Conference Series, 4th Tuesday, 12:30, Bates Medical Center, Bentonville

FORT SMITH-AHEC

Grand Rounds, 12:00 noon, first Wednesday of each month, Sparks Regional Medical Center
 Neuroradiology Conference, 1st Tuesday of each month, 12:00 noon, Sparks Regional Medical Center, 7th floor dining room
 Neuroscience & Spine Conference, 3rd Wednesday each month, 12:00 noon, St. Edward Mercy Medical Center
 Tumor Conference, Mondays, 12:00 noon, St. Edward Mercy Medical Center
 Tumor Conference, Wednesdays, 12:00 noon, Sparks Regional Medical Center

JONESBORO-AHEC NORTHEAST

AHEC Lecture Series, 1st & 3rd Tuesday, 12:00 noon, Stroud Hall, St. Bernard's Regional Medical Center. Lunch provided.
 Arkansas Methodist Hospital CME Conference, 7:30 a.m., Hospital Cafeteria, Arkansas Methodist Hospital, Paragould
 Chest Conference, 2nd Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
 Citywide Cardiology Conference, 3rd Thursday, 7:30 p.m., Jonesboro Holiday Inn
 Clinical Faculty Conference, 5th Tuesday, St. Bernard's Regional Medical Center, Dietary Conference Room, lunch provided
 Craighead/Poinsett Medical Society, 1st Tuesday, 7:00 p.m. Jonesboro Country Club
 Greenleaf Hospital CME Conference, monthly, 12:00 noon, Greenleaf Hospital Conference Room. Lunch provided.
 Independence County Medical Society, 2nd Tuesday, 6:30 p.m., Batesville Country Club, Batesville
 Interesting Case Conference, 4th Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
 Jackson County Medical Society, 3rd Thursday, 7:00 p.m., Newport Country Club, Newport
 Kennett CME Conference, 3rd Monday, 12:00 noon, Twin Rivers Hospital Cafeteria, Kennett, MO
 Methodist Hospital of Jonesboro Cardiology Conference, every other month, 7:00 p.m., alternating between Methodist Hospital Conference Room and St. Bernard's, Stroud Hall. Meal provided.
 Methodist Hospital of Jonesboro CME Conference, 2nd Tuesday, 7:00 p.m., Cafeteria, Methodist Hospital of Jonesboro
 Neuroscience Conference, 3rd Monday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch Provided.
 Orthopedic Case Conferences, every other month beginning in January, 7:30 a.m., Northeast Arkansas Rehabilitation Hospital
 Perinatal Conference, 2nd Wednesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
 Piggott CME Conference, 3rd Thursday, 6:00 p.m., Piggott Hospital. Meal provided.
 Pocahontas CME Conference, 3rd Wednesday, 12:00 noon & 7:30 p.m., Randolph County Medical Center Boardroom
 Tumor Conference, Thursdays, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
 Walnut Ridge CME Conference, 3rd & last Tuesday, 12:00 noon, Lawrence Memorial Hospital Cafeteria
 White River CME Conference, 3rd Thursday, 12:00 noon, White River Medical Center Hospital Boardroom

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Behavioral Science Conference, 1st & 3rd Thursday, 12:00 noon, Jefferson Regional Medical Center
 Chest Conference, 2nd & 4th Friday, 12:00 noon, Jefferson Regional Medical Center
 FP Journal Club, 2nd Monday, 12:00 noon, Jefferson Regional Medical Center
 Internal Medicine Conference, 2nd & 4th Thursdays, 12:00 noon, Jefferson Regional Medical Center
 Obstetrics/Gynecology Conference, 2nd Tuesday, 12:00 noon, Jefferson Regional Medical Center
 Orthopedic Case Conference, 2nd & 4th Wednesdays, 12:00 noon, Jefferson Regional Medical Center.
 Pediatric Conference, 3rd Wednesday, 12:00 noon, Jefferson Regional Medical Center
 Radiology Conference, 3rd Tuesday, 12:00 noon, Jefferson Regional Medical Center
 Southeast Arkansas Medical Lecture Series, 4th Tuesday, 6:30 p.m., Locations vary. Dinner meeting.
 Tumor Conference, 1st Wednesday & 3rd Friday, 12:00 noon, Jefferson Regional Medical Center

TEXARKANA-AHEC SOUTHWEST

Chest Conference, every other 3rd Tuesday/quarterly, 12:00 noon, St. Michael Health Care Center
 Neuro-Radiology Conference, 1st Thursday every month at St. Michael Health Care Center and 3rd Thursday of every month at Wadley Regional Medical Center, 12:00 noon.
 Residency Noon Conference, Monday, Wednesday, Thursday, Friday each week, alternates between St. Michael Health Care Center & Wadley Regional Medical Center
 Tumor Board, Fridays, except 5th Friday, 12:00 noon, Wadley Regional Medical Center & St. Michael Hospital
 Tumor Conference, every 5th Friday, 12:00 noon alternates between Wadley Regional Medical Center & St. Michael Hospital

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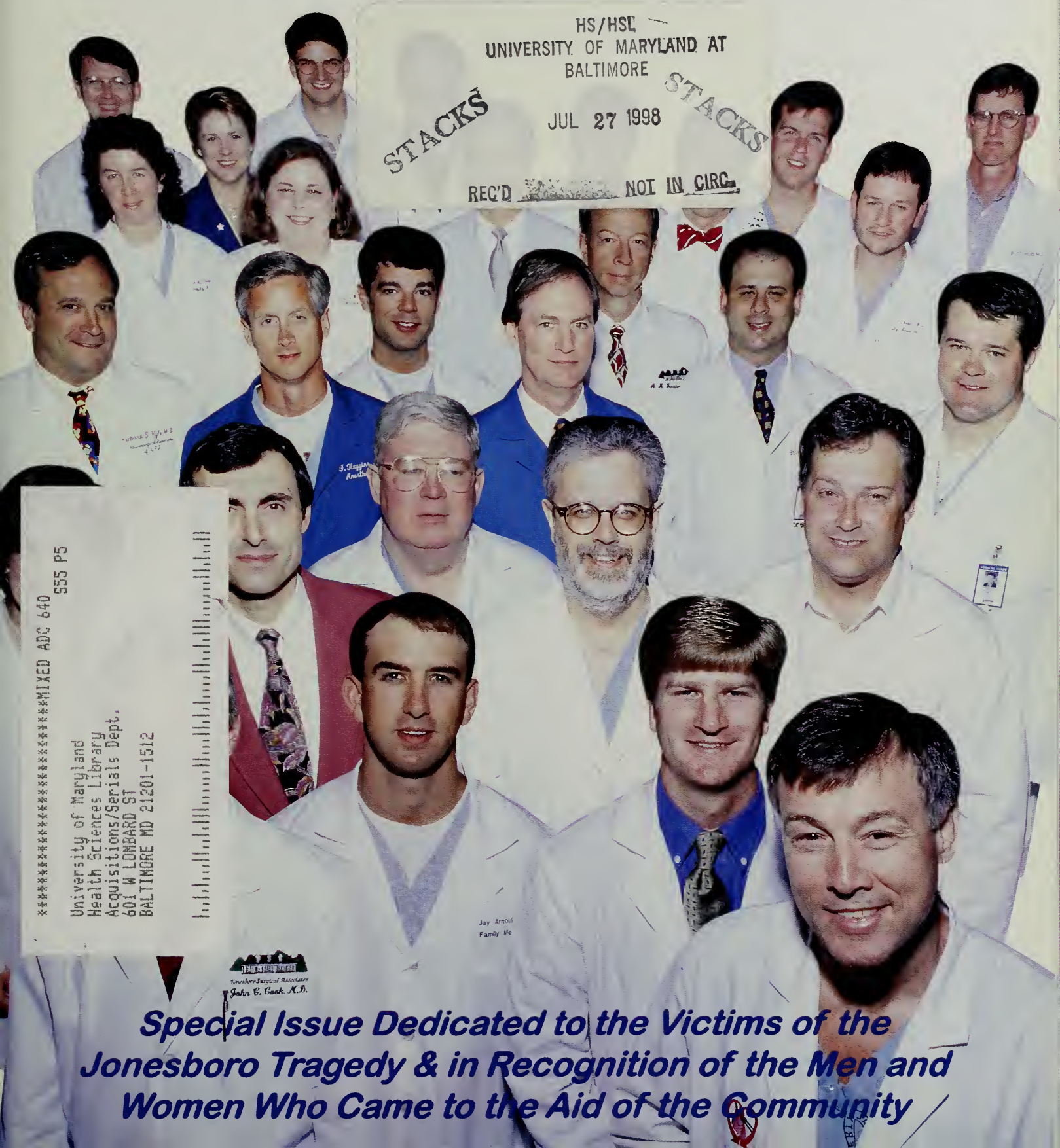
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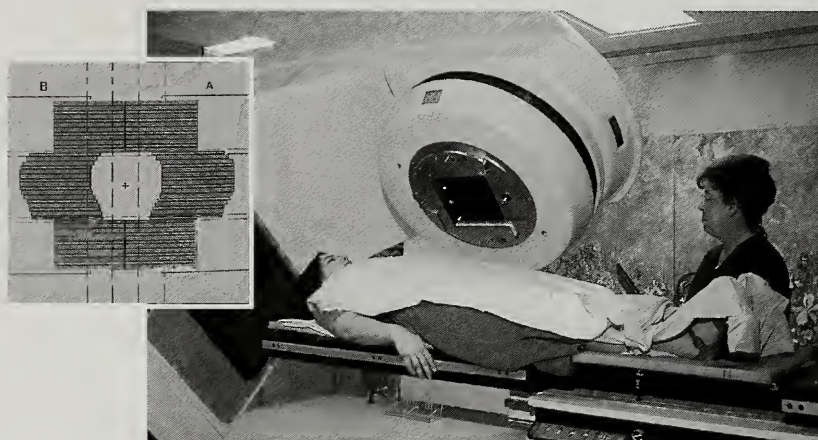
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THE JOURNAL OF THE ARKANSAS MEDICAL SOCIETY

Volume 95 Number 2

July 1998

*Award-Winning Journal of the Arkansas Medical Society
Recipient of the ASAE Excellence in Communications Award*

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Cover photograph taken by St. Bernards Regional Medical Center with alterations and design by McNabb Kelley & Barré Marketing Communications Company in Jonesboro. The photo is of physicians who were involved in aiding the victims of the recent schoolyard shooting in Jonesboro.

Up-to-date Country Doctors

Ben N. Saltzman, M.D.*

As I sat at the kitchen table, a blank notebook before me, I asked my son John if he had some suggestions to offer me so that I could get started writing this editorial. He asked what interested me to the extent that my colleagues would be willing to share in my interest.

I responded by stating that I was becoming more and more aware of the fact that the public was tending to accept the possibility that perhaps we have gone overboard in relying upon prescriptions to cure most illnesses, when we should perhaps be looking at natural compounds which could accomplish the same cures at considerably less expenditures of time and money. When I see advertisements related to this form of thinking, I seek the credentials of the authorities and unfortunately find that many of these individuals have the MD after their names. Perhaps I have been missing the boat.

John said, perhaps I can help. Have you seen the June issue of *Life magazine*? There is an interesting article entitled "Country Doctor." Your own experiences over the years match those of the doctor about whom the article is written, my son said.

I found myself reading an excellently written article by Claudia Glenn Dowling about the life and experiences of Dr. David Loxterkamp. I hope to have the privilege of meeting him sometime in the near future. We are not contemporaries. I graduated from the University of Oregon with a BA in Psychology in 1935, an MA in Psychology in 1936 and from the University of Oregon College of Medicine in 1940 with the MD degree. I spent the next six years in the Panama Canal Zone as an intern and resident at Gorgas Hospital in Ancon and four years of active duty as a Captain in the United States Army. During that time, I married the first nurse that I met as an intern at Gorgas Hospital. Our daughter Sue Ann was born in Gorgas Hospital in 1945, and the three of us came to Mountain Home where I would practice rural medicine in a town of 1,200 people. Most certainly, I had very little rural medicine experience, but I learned fast...I had to.

There was no local hospital. There were two retired doctors in the community and one fairly active doctor. The war was over and the GIs were coming home. Hence, I soon became quite expert in delivering babies on a collapsible delivery table on dirt floors by candlelight or kerosene lamps or with the use of automobile headlamps through open windows. People wondered why I stayed in Mountain Home. The answer is simple. I liked the people and they accepted me and my little family. I got to deliver my two boys some years apart. Like Dr. Loxterkamp, I learned a lot from my patients.

I averaged about four hours of sleep per night. I also made many house calls, usually many miles from my home.

In spite of my lack of sleep, I became involved with many aspects of the small community life. I was on the city council for seven years, was President of the Chamber of Commerce four different years, became President of the Rotary Club and later District Governor of Rotary International and eventually an International Director.

My office calls were \$2 per visit and house calls were \$10 each of which I rarely received. The roads were such that I averaged one blown tire each trip. I helped found the Elks Lodge and made many friends statewide.

From the medical standpoint, with sponsorship from the doctor who was responsible for my coming to Mountain Home to take his place, I passed the State Medical Board examination and was very quickly appointed a member of the Rural Health Committee of the Arkansas Medical Society and eventually headed the American Medical Council on Rural Health.

The American Medical Association was my stimulus toward involvement in the rural health of my community. Our Council on Rural Health was the stimulus that provided opportunities to improve rural health care over the entire country.

The battle is far from over but we have made a real dent in the shortage of health professionals in our country, particularly in the rural areas. Our medical schools are encouraging our students to concentrate their efforts on becoming up-to-date country doctors.

* Dr. Saltzman, a member of the editorial board for *The Journal of the Arkansas Medical Society*, is a retired family practitioner of Mountain Home.

To Trade or not to Trade?...Should not be a multiple-choice question

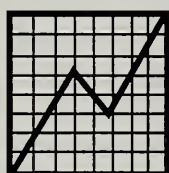


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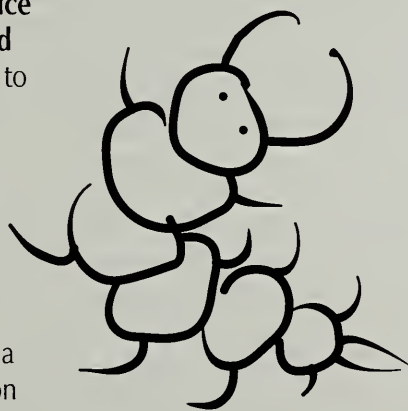
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CORRECTION NOTICE

In the April 1998 issue of *The Journal of the Arkansas Medical Society* there was an error in the *New Members* section on page 505. New member Dr. Lawrence Roy Bigongiari's name was spelled incorrectly. His name also appeared spelled incorrectly in the May Index. The correct spelling is as it appears here.

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Medicine in the News

Health Care Access Foundation

As of June 1, 1998, the Arkansas Health Care Access Foundation has provided free medical service to 14,023 medically indigent persons, received 26,766 applications and enrolled 52,622 persons. This program has 1,894 volunteer health care professionals including medical doctors, dentists, hospitals, home health agencies and pharmacists. These providers have rendered free treatment in 69 of the 75 counties.

Physician Who Helped Create AMAP Meets Standards

The first physician to meet the standards of the new American Medical Accreditation Program (AMAP), a program developed by the American Medical Association, was recently awarded a certificate of accreditation. Randolph D. Smoak, Jr., M.D., a surgeon from Orangeburg, South Carolina, and vice chair of the AMA Board of Trustees, became the first physician to successfully undergo an AMAP review of his qualifications using standards for training, behavior, practice and patient care. Dr. Smoak, who also serves as chair of the AMAP Governing Body, sought to lead other physicians by example. "As chair of the body that set the standards for this new national benchmark of physician quality, I feel obligated to demonstrate my commitment to the importance of this new process by assuring my own practice meets the same quality measures that I helped create for others," Dr. Smoak said.

Information provided by the AMA FED-NET dated 6/5/98.

National Market Trends

*In another shock to the health care market, Minneapolis-based United HealthCare has agreed to acquire Kentucky-based Humana, Inc. to form the largest managed care company in the country, providing managed care coverage to 10.4 million people. The merged company will have even greater bargaining power with physicians and hospitals, and will use that to boost profits. Both plans are considered leaders in efforts to use data to eliminate practice variations by region. (*Wall Street Journal*, May 29, 1998)

*A California jury awarded Dr. Thomas W. Self \$1.75 million after he was fired by his medical group following several meetings where he was criticized for spending too much time with patients and ordering too many tests. The jury agreed with Dr. Self that the medical group violated California law when it fired him for advocating the best care for his patients. The jury still must decide whether to award punitive damages. Although the verdict was against a medical group, legal observers noted that it is a warning sign to health plans that put financial concerns over the

physician-patient relationship. (*Los Angeles Times*, April 15, 1998)

*An Arizona jury has found Cigna Healthcare of Arizona guilty of negligence and ordered it to pay \$3 million in damages to a woman who alleged that an orthopedic surgeon under contract with Cigna failed to diagnose a bacterial infection quickly enough, resulting in two spinal surgeries. In *Wilson v. Cigna Healthcare of Arizona*, the plaintiff's attorneys successfully argued that Cigna was responsible for the physician's negligence on the theory of apparent agency. The jury agreed that Cigna had represented the physician as its agent and induced the plaintiff to rely on that. (*BNA's Managed Care Reporter*, April 29, 1998)

*The Wyoming Supreme Court recently ruled that a utilization review decision denying preauthorization of surgery was a medical decision and not simply an administrative decision. In *Long v. Great West Life and Annuity Insurance Co.*, the court held that the plaintiff was not required to exhaust the health plan's administrative procedures before filing a lawsuit based on a coverage decision because utilization review involves the plan administrator in medical decisions and it goes "beyond the traditional understanding of insurance claims and coverage." (*BNA's Managed Care Reporter*, May 13, 1998)

*A federal district court in New Jersey recently ruled that ERISA does not preempt a state law negligence claim brought against an HMO by parents of an infant who died one day after her discharge from a severe undiagnosed infection that developed into meningitis. In *Bauman v. U.S. Healthcare, Inc.*, the parents allege that U.S. Healthcare was negligent in adopting the 24-hour discharge policy, in failing to provide an in-home visit requested by the parents as called for in the plan, and in supervision of the physician who discharged the patient. The court rejected the plan's argument that the state court claims were preempted by ERISA, holding that the allegations focus on the quality of care provided by the HMO and were not merely based on failure to provide benefits. (*BNA's Health Law Reporter*, April 9, 1998)

*California-based Union of American Physicians & Dentists (UAPD) is targeting Kaiser Permanente physicians in Northern California for organizing. UAPD views Kaiser as a ripe unionizing target because many Kaiser employees are already unionized, and those employees have generally been treated better by Kaiser. While Kaiser's Northern California physicians did not receive a raise in 1998, nurses and other unionized workers signed agreements for raises of 3% a year. While Kaiser says that it does not stand in the way of unionization efforts, its representatives have already questioned whether the 2,800 physicians who are shareholders in the Permanente Medical Group are legally

entitled to organize. (*BNA's Managed Care Reporter*, May 13, 1998)

*Late payment of health claims continues to be a serious problem in parts of the country. The New York State Society of Medical Oncologists and Hematologists has written Aetna U.S. Healthcare and the state insurance commissioner alerting them to a pattern of late payment by Aetna where claims that should be paid within 45 days are not being paid for months. The physicians also claim that Aetna's claims representatives have been completely unresponsive to member complaints about late payment. The Massachusetts Medical Society has been meeting with Harvard Pilgrim Health Care (HPHC) to address the issue of delayed claims processing, a problem which has grown significantly in recent months. HPHC attributes the problem to computer conversions and unprecedented growth. HPHC has offered to provide no-interest loans to physicians experiencing financial problems as a result of delays in payment. (*BNA's Managed Care Reporter*, April 22, 1998)

*Oregon HMOs recently have experienced flat profits or posted losses in the face of rising medical costs, especially costs associated with prescription drugs. As a result, substantial premium increases are expected. This is a significant trend because Oregon is a very mature managed care market where the early "efficiencies" of managed care have already been realized. This will pose an enormous challenge to the HMOs, which are facing rising costs and lower membership growth in a very competitive market. (*BNA's Managed Care Reporter*, April 29, 1998)

Information provided by the AMA FED-NET dated 6/5/98.

Reasons for Use of Alternative Medicine

Why do some patients seek alternative health care? This national survey of 1,035 individuals asked whether during the previous year they had used alternative health practices, such as acupuncture, chiropractic, or massage therapy.

Variables identified as correlates of the use of alternative health care (in order of importance) included anxiety; back problems; urinary tract problems; chronic pain; classification in a group identified as "culturally creative" (i.e., those who tend to be at the leading edge of cultural change and enjoy new ideas); having had a transformational experience that changed their beliefs; a holistic philosophy; worse health status; and higher education. Use of alternative medicine was reported by 50% of those with a graduate degree versus 31% of those with a high school education or less. Alternative medicine use was also identified by 44% of those with annual household incomes of \$60,000 or more versus 33% of those with incomes of less than \$12,500. Dissatisfaction with conventional medicine did not predict use of alternative medicine.

Comment: These data confirm prior reports of high use of alternative therapies and indicate that the motivations are tied to patients' lifestyles and beliefs. How-

ever, although dissatisfaction with conventional care per se may not be a factor, the author did not ask the question "Is conventional medicine solving all of your medical problems?" - TH Lee

Astin JA. Why patients use alternative medicine: Results of a national study. *JAMA* 1998 May 20, 279:1548-53.

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AMS Newsmakers

Dr. Carlos Anaya, of El Dorado, recently attended the American Academy of Pediatrics Workshop in Neonatology in Scottsdale, Arizona, and the 1998 Annual Meeting of the Pediatric Academic Societies in New Orleans.

Dr. Simmie Armstrong, a Pine Bluff family practitioner, was recently honored as *Member of the Year* by the Southeast Arkansas Medical, Dental and Pharmaceutical Association.

Dr. Filipe Masquil, a McGehee physician of internal medicine, was recently named to the listing of "Who's Who in Medicine." Dr. Masquil's picture and biography will be displayed permanently in the Library of Congress in Washington, D.C.

Dr. Deanna Ruddell, an allergy and asthma specialist of Little Rock, was recently elected to serve on the Board of Directors for the American Lung Association of Arkansas. As a board member, Dr. Ruddell

will be personally active in furthering the mission of the American Lung Association.

White River Medical Center honored members of its medical staff recently in celebration of National Doctors Day. Recognized were past chiefs of staff including **Dr. Charles McClain**, 1982-85; **Dr. J.D. Allen**, 1987; **Dr. Robert Walton**, 1988-89; **Dr. Jim Lytle**, 1990-91; **Dr. J.R. Baker**, 1992-93; **Dr. Bill Waldrip**, 1994-95; and **Dr. Robert Baker**, 1996-97. The current chief of staff is **Dr. Steve Alexander**. Medical staff officers **Dr. J.D. Allen**, vice chief of staff, and **Dr. E.J. Jones**, secretary/treasurer were also recognized.

Send your accomplishments and photo for consideration in *AMS Newsmakers* to:

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Topics in Search of Authors

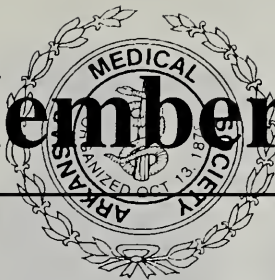
You can influence your peers - and give something back to your profession - if you plan to write an article for *The Journal of the Arkansas Medical Society*.

The Journal needs your thoughts and ideas. So why not consider putting your expertise and experience on paper? Here are some topics in search of an author.

- Practice Management for today's physicians
- Coping with difficult patients
- Women's health issues
- Teens and drug use
- Medicare/Medicaid issues
- Medical ethics and health care
- New treatments and technology
- Smoking and the Tobacco Industry
- Access to care for the indigent

For information about submitting an article to *The Journal of the Arkansas Medical Society*, see *Information for Authors* on page 560 or call Tina Wade at 501-224-8967 or 1-800-542-1058.

New Member Profile



Loren R. Keldahl, M.D.

PROFESSIONAL INFORMATION

Specialty: Urology

Years in Practice: 25 Years

Office: Blytheville

Medical School: University of Minnesota Medical School, Minneapolis, 1966

Internship: Cook County Hospital, Chicago, Illinois, 1967

Residency: University of Minnesota Medical School, Minneapolis, 1970

Other Business Affiliates/Organizations: Chamber of Commerce and the Arkansas Urological Society

PERSONAL INFORMATION

Family: Wife, Margaret (Maggie); 3 children, 2 stepchildren and 3 grandchildren

Pets: I am the doting master of two German Shepards

Date/Place of Birth: July 15, 1940, in Fergus Falls, Minnesota

Hobbies: Gardening and landscaping

THOUGHTS & OTHER INFORMATION

If I had a different job, I'd be: A designer of cars

Historical figure I most identify with: Harry Truman

Worst Habit: Car shopping

Best Habit: "Picking up" after other people

Behind my back, they say: "He's intense!"

Most valued possessions: Cars, motorcycle and garden tractor

People who knew me in medical school, thought I was: Self-motivated and hard working

Nobody knows I: Am a sensitive, caring man

Favorite vacation spot: Italy

One goal I haven't achieved, yet: Seeing all 50 States

One goal I am proud to have reached: Putting myself through college and medical school

Favorite childhood memory: A rail trip on Northern Pacific to Washington State

One of my pet peeves: Indifference; apathy

First Job: Car mechanic

Worst Job: Newspaper carrier in winter in Minnesota

The last book I read: *Ageless Body, Timeless Mind* by Deepak Chopra

Favorite music: Variety - I enjoy music very much

One word to sum me up: Complex (per my wife)

My philosophy on life: Continue to learn more about the integration of science and religion

If you would like to appear in *New Member Profile*, contact Tina Wade at AMS at (501) 224-8967 or 1-800-542-1058.



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- Strong penalties for pushing tobacco on our kids.
- Strong penalties if teenage smoking does not decline.
- Strong FDA regulation.
- An increase in the price of tobacco products to discourage youth from smoking, and to cover the cost of tobacco-related illnesses.
- A promise that adequate tobacco funds are spent on tobacco-use prevention and control programs as well as other health programs like Medicare and Medicaid.

Pass strong tobacco legislation and pass it now.

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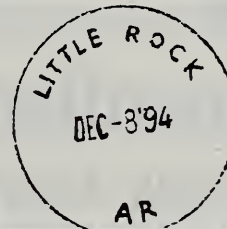
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Send your letters to the editor for publication in the **Mail** section to: Tina G. Wade, Arkansas Medical Society, P.O. Box 55088, Little Rock, AR 72215-5088; FAX: 501-224-6489; E-mail: ams@arkmed.org

The following letters were received in response to the editorial titled "On Mentors, Epitaphs & Patients: What it takes to become a beloved physician" by Dr. Jerry Byrum. This editorial appeared in the May 1998 issue of *The Journal of the Arkansas Medical Society*.

Your editorial in the current journal is excellent. It is very timely for us to be reminded of the characteristics and practice methods that physicians will find to enhance their rapport with their patients. I agree with you completely.

Samuel E. Landrum, M.D.

I want to express my appreciation for the material presented in your recent article published in the May issue of *The Journal of the Arkansas Medical Society* under the title of "On Mentors, Epitaphs & Patients."

I recently retired from the practice of medicine having graduated in 1957. I can identify with the episodes mentioned. I too can recall mentors as you mentioned who spent countless hours teaching and showing me techniques in surgery and patient care. I also recall the same type of patients you mentioned. The things covered in your article are common to all who practice medicine. It is a great privilege that we have to share in the lives of people in a way that no other profession experiences.

You expressed many things in the article that will be useful to medical students as they prepare for their work in the practice of medicine. I appreciated your thoughts and obvious dedication to your patients and families.

Harold Hutson, M.D.

I just read your article in my issue of *The Journal of the Arkansas Medical Society* which came today.

This is a very good article and I am taking the liberty of making sure that we pass it on to our current housestaff. This is an outstanding editorial and you certainly convey some ideas that need to be conveyed very well. It is a great pleasure to me to see our previous houseofficers not only continue to do well,

but also, have such obvious great insight into being an outstanding physician.

Betty A. Lowe, M.D.

Today I read with interest your editorial entitled *What It Takes To Become A Beloved Physician*. I was extremely impressed with your ability to communicate and the recognition you gave to the physicians that have made a difference in your life, especially in regard to the treatment of patients.

Because of the sensitivity that you obviously have, these men played a great part by sharing with you their concerns on being sure that appropriate care was offered every patient regardless of circumstances.

Upon reflection, we can all find so many physicians that have played a part on making us better physicians through the years. I commend you on this article and especially the recognition you have placed concerning these very fine physicians.

W. Ray Jouett, M.D.

Enjoyed your article – very well done and so true.

Gerald N. Weiss, M.D.

I enjoyed your article on becoming a "beloved physician." We could all learn from it.

Kelsy Caplinger, M.D.

Just a note to say thanks for your editorial in JAMS. Very well done. Keep up the good work!

John Wayne Smith, M.D.

The Journal encourages letters to the editor and letters in response to all articles published in JAMS. If you have comment on an article, send it to the Journal editor at the address, fax or e-mail above. If you are the author of a recent article that appeared in the journal, please forward any responses you have received to the AMS Journal office. Or, if you are an author and have received verbal comment on your article, ask the person to jot the comment down and send it to the AMS Journal office. The MAIL section will appear once we have several comments to publish.

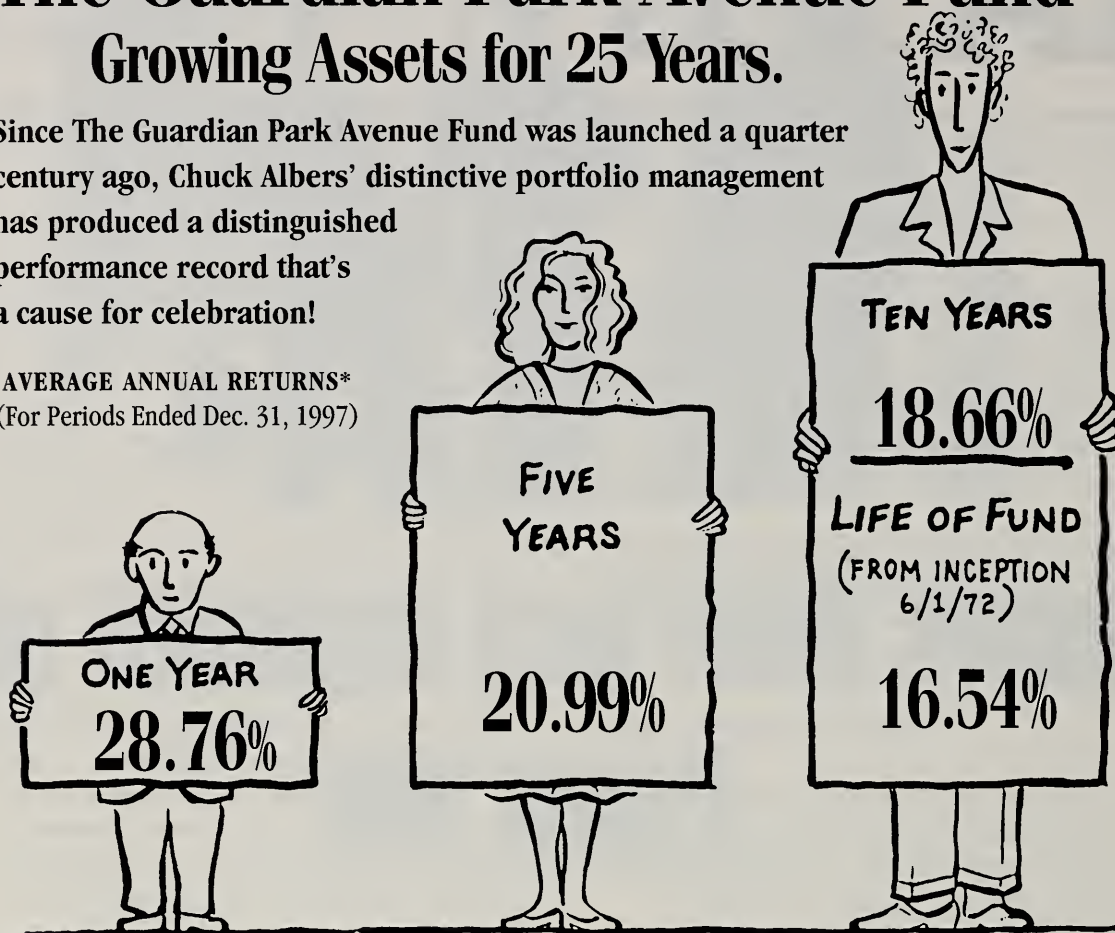
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Tragedy in Jonesboro

What Have We Learned?

Warren A. Skaug, M.D.*

At midday on March 24th, an unspeakable tragedy occurred in Jonesboro. Thirteen children and two middle school teachers were methodically shot by two classmates, leaving five dead, several with serious injuries, and countless witnesses and family members with anger, fear, and sadness. The occurrences of that day were instantaneously broadcast throughout the world and are well known to most physicians around the state. The precise events that occurred in the emergency department of St. Bernards Regional Medical Center and the superb medical response are well presented by Drs. Robert Beaton and Buck Rusher in this issue of *The Journal of the Arkansas Medical Society*. In the wake of these catastrophic events, what is there to learn? What were the causes? What are the risks that this may happen again? As doctors, how should we respond?

A schoolyard shooting, like other individual acts of tragic youth violence, has all the markings of a random event, the reasons inscrutable and the future risks inestimable. But that is not so! It is time that physicians - that's you and me - open our eyes to the larger picture of childhood violence, and resolve to be part of the solution. Let's look at some of the lessons involved here.

Lesson #1: I have lived in Jonesboro for nearly 18 years, and I am proud of my town. We have a prosperous economy, many strong churches, social services, and a high level of volunteerism. It is a place where we and our children have felt safe and secure. I cannot emphasize how horrified and surprised we were at the events of March 24th. That, tragically, is one of the key points we learned. In a country that is highest in youth homicide, suicide, and firearm related deaths, among the 26 richest nations of the world where the second most common cause of death in adolescents is homicide, *all* communities are at unacceptable risks for firearm and other youth violence.¹

Lesson #2: A wealth of research has shown that while anger and frustration are universal, violence in

response to these feelings is learned behavior; learned from experiencing or witnessing violence in the home, learned from television and other media violence. The average child observes approximately 12,000 violent acts on television per year. The younger the child, the better he/she learns.² There is experience to show that youthful violence can be partially reversed through conflict resolution training and that these skills can be taught to teachers, mainstream students, troubled youths, and parents alike.

Lesson #3: No one has America out-gunned, and we have a poor track record of safe gun practices. Results from a recent national survey estimate that there are 192 million working firearms in private possession; one-third are handguns.³ One in five of all gun-owning households store guns loaded and unlocked in the home. Interestingly, a study of adolescent males in the rural southern U.S. found 48% to own a firearm - these boys were mostly from hunting households and most had acquired their guns as gifts.⁴ Though these demographics of gun ownership differ from the urban handgun epidemic, the results of inadequate safety precautions are just as lethal.

There is a wealth of information and disturbing statistical data not presented here, but I believe the point is clear. Youth violence is a nationwide phenomenon of tragic proportions involving all regions and communities of our nation, and it is an epidemic of growing proportions that requires physicians to act. We now know that there are action steps of proven value in stemming this tide.

Let us start with our own practices. How many of us in primary care medicine routinely screen for domestic violence? How often do triage nurses in emergency departments ask about it? I suspect that very few practices or ERs do such screening. We need to start immediately to do so; we are overlooking a powerful tool to intervene in the cycle of spousal and child abuse that feeds into youth violence. A simple inquiry about the presence of guns in the home can open a discussion of firearm safety and appropriate removal

* Dr. Skaug is a pediatrician with The Children's Clinic in Jonesboro.

of child access to lethal weapons. There are inexpensive brochures available from the American Academy of Pediatrics to help with this.⁵

What can we do about the media? With forty years of research proving a significant role in child violence, we must do more. A start can be incorporating a brief word about television, movies, and video games when talking to parents of young children. We can recommend that parents be constantly involved in program selection, and from the time their kids reach the clicker, there should be rules about viewing. For older kids and teens, parents need to watch many of these programs and games and discuss them. Quick, easy handouts for these topics are also available.⁶ Similar to Massachusetts, perhaps the Arkansas Medical Society could produce its own.


There are at least two courses in conflict resolution that are planned for Jonesboro for the near future. One of our school districts has currently incorporated such a curriculum into its spectrum of services. It would be appropriate for every district in the state to do so. Jonesboro is embarking on an afterschool program for at-risk youth called *City Team*. Both on and off campus after school supportive services need to be enhanced in all of our communities. Simply increasing the link between kids and supportive peer and adult role models will have a positive effect. It is

appropriate for physicians to be actively involved in these broader community issues. We have a lot of influence and knowledge to offer.


It is a sad circumstance that as of this writing, there have been two school shootings since the Westside tragedy. We cannot pretend it won't happen again, and we cannot tolerate a national epidemic of youth violence that is taking more than 4,000 lives per year. Dear colleagues, let's get busy and fight back!

References:

1. American Academy of Pediatrics: *Position Statement on Youth Violence*, 1997.
2. Victor Strasburger, M.D.: "*Sex, Drugs, Rock'n'Roll*" and the Media - *Are the Media Responsible for Adolescent Behavior?*: Adolescent Medicine: State of the Art Reviews; vol.8, No.3, October 1997, Philadelphia, Hanley & Belfus.
3. Cook, P.J., Ludwig, J.: *Guns in America: Results of a Comprehensive National Survey on Firearms Ownership and Use* Washington, D.C.: National Institute of Justice; 1997.
4. Sadowski, L.S., Cairns, R.B., Earp, J.A.: *Firearm Ownership Among Non-urban Adolescents*. American Journal of Diseases of Children, 1989; 143:1410-1413.
5. American Academy of Pediatrics/Center to Prevent Handgun Violence: *Keep Your Family Safe from Firearm Injury*. Second Edition; 1996
6. Massachusetts Medical Society Committee on Violence: *Violence Prevention for Children and Youth - Parent Education Cards*, 1997.





Special Appreciation to St. Bernards Regional Medical Center for the cover of this issue of JAMS and for providing vital information and assistance.



Special Appreciation also to Drs. Skaug, Beaton and Rusher for sharing their thoughts and experiences with the members of the Arkansas Medical Society.

Unfortunately, we never know when tragedy will strike but hopefully we can learn from others.

This issue is dedicated to the victims of the Jonesboro Tragedy and in recognition of the physicians, healthcare professionals and many others who came to the aid of the community.



When Tragedy Strikes

A Medical Community in Action

Robert Beaton, M.D.*

Buck Rusher, M.D.**

In the past six months, four separate and seemingly unrelated shootings have taken place at American schools. One of the most tragic of these occurred on March 24, 1998, at Westside Middle School in Jonesboro, Arkansas. The result of this tragedy included five dead and ten wounded. This article will attempt to review this experience and how it was handled from a medical point of view. The triage, transport, and care of multiple victims of this sort will be reviewed and critiqued in order to better understand how such an event was handled in a community hospital.

The following synopsis is based on media reports:

On March 24th, 1998, two young boys, ages 11 and 13, skipped school and went to the oldest boy's house with a blowtorch, bent on obtaining an arsenal of weapons. When unsuccessful, they then went to the youngest boy's grandfather's residence. They were able to break in and secure weapons and ammunition. Following this, they carefully orchestrated a planned ambush of fellow students at Westside Middle School. The attack killed 4 students and 1 teacher and wounded 10. The assailants primarily used a 30.06 deer rifle equipped with a high power scope, and an M-1 carbine. Hundreds of rounds were fired into the crowd of students and teachers as they evacuated the building, where one of the boys had set off a fire alarm. The boys were apparently aware of the school's evacuation plan and knew that the first class exiting the building would be mostly girls, some of which were apparently targeted by the boys because of prior arguments.

The initial call to St. Bernards Regional Medical Center was received at approximately 12:41 p.m. This

call was of a shooting at Westside Middle School, with no mention of the number or types of injuries. When the call was received, the surgeon on call and the operating room staff were notified of a possible gunshot victim. Within the next five minutes the hospital was notified of multiple victims at the scene, with three "trauma codes" being transported. It was at this time the hospital's disaster plan was instigated. As luck would have it, the afternoon cases had not yet started in full swing, so the OR suites were kept available, which later proved critical in being able to handle this number of critically wounded. Within 10-15 minutes of the initiation of the disaster plan, there were six general surgeons, two cardiovascular surgeons, one neurosurgeon, and five orthopedic surgeons in the Emergency Department. Three emergency physicians assisted them. The chief emergency room physician supervised the staff.

The surgeons were each assigned a room along with a nurse from either the emergency department or one of the intensive care areas. Some rooms were assigned two surgeons, and were reserved for more critically injured patients. O-negative blood was waiting in the ED prior to the arrival of the first patient. The triage responsibilities were given to the emergency physicians.

Each patient was assigned to a surgeon. Those with extremity injuries only were assigned to orthopedic surgeons if stable. If unstable, the vascular surgeon was consulted. Chest and abdomen wounds went to cardiovascular and general surgeons. Two thoracotomies were done in the ED. One resulted in transfer to OR, but death was imminent. One patient was pronounced DOA from a massive gunshot wound to the head.

Every patient was cared for and/or operated on within 80 minutes of the shooting. Within 12 days, all patients surviving surgery with repairable wounds had

* Dr. Beaton is Medical Director of the Emergency Department at St. Bernards Regional Medical Center in Jonesboro.

** Dr. Rusher is a general, thoracic and vascular surgeon in Jonesboro.

SEARCHING SEARCY FOR THE RIGHT PRACTICE?

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been discharged from the hospital in satisfactory condition.

Just as there was cooperation among the various ambulance services and personnel, there was equal teamwork among the various surgeons and other physicians with the hospital. Additionally, the ministries of the city were immediately at the sides of the

"In reviewing the events surrounding the medical center's participation in the Westside tragedy, there was a unanimous conclusion that the hospital performed well, both clinically and operationally. A few minor areas for improvement were noted. The primary areas concerned: 1) identification of the students who did not have identification, and 2) timely communication to family members, related primarily to the first issue." - John Heer, Chief Operating Officer, St. Bernards Regional Medical Center

worried and grieving families offering solace. Less than 20 minutes following the 911 call, there were radio requests for blood, and people had to be turned away from the Red Cross centers because of the overwhelming response.

A website was created by the hospital for the dissemination of information. Formal press releases were given to both local and national news agencies from a temporary media center set up separately from the hospital.

Within the following two weeks the hospital and the associated departments formally undertook a review of the disaster. The results of that review will be implemented in future disaster planning and strategy. We hope and pray that no such plan will ever be needed in this small community. We are still searching for answers to unanswerable questions. Those questions will most likely be with all of us for quite some time - for many, the remainder of their lives. Our community will survive, although changed forever because of that day in March of 1998.



Pitfalls of Thrombolytic Therapy for Myocardial Infarction

Wade M. Ceola, M.D.*

Sami I. Harik, M.D.**

The use of recombinant tissue plasminogen activator (rtPA) in the treatment of acute myocardial infarction has improved patients' outcome.¹ The narrow therapeutic window for thrombolysis necessitates that treatment often be started by generalists and emergency room physicians. However, thrombolytic therapy can have serious complications, such as intracranial hemorrhage.^{2,3} We recently encountered a patient with multiple intracerebral hematomas after rtPA treatment for a misdiagnosed myocardial infarction.

Case Report

A 61-year-old-man was rushed to hospital after a generalized seizure. Shortly thereafter, he had another seizure and was treated with intravenous phenytoin. Because of high serum creatine kinase and S-T elevation on electrocardiogram (ECG), the patient was presumed to have a myocardial infarction and was given rtPA (100 mg intravenously over 4 hours) and intravenous heparin (5000 U bolus followed by 1000 U/hour). Heparin was discontinued 6 hours later because of an enlarging tongue hematoma. He was semi-comatose and was thought to be postictal, but then became combative and was sedated with intravenous lorazepam and transferred to the VAMC in Little Rock for management. There, myocardial infarction was ruled out after repeat ECG and noting the non-cardiac origin of the elevated serum creatine kinase. Head CT scan showed nine small hyperintense round lesions in both cerebral hemispheres, but mostly in the left frontal lobe (Figure 1), which did not enhance with contrast. These lesions were interpreted to be lobar cerebral hematomas.

All medications other than phenytoin were discontinued and the patient improved and regained consciousness within two days. Neurological examination

repeated several days after the patient regained consciousness showed marked dementia. The mini-mental state examination score was 12 out of 30. The rest of the neurological examination showed a mild drift of the extended right upper extremity, increased myotatic stretch reflexes on the right, and a right Babinski response. The intracerebral hematomas were not seen on head CT that was repeated 10 days later. The patient was discharged in a stable condition similar to his state prior to the present illness.

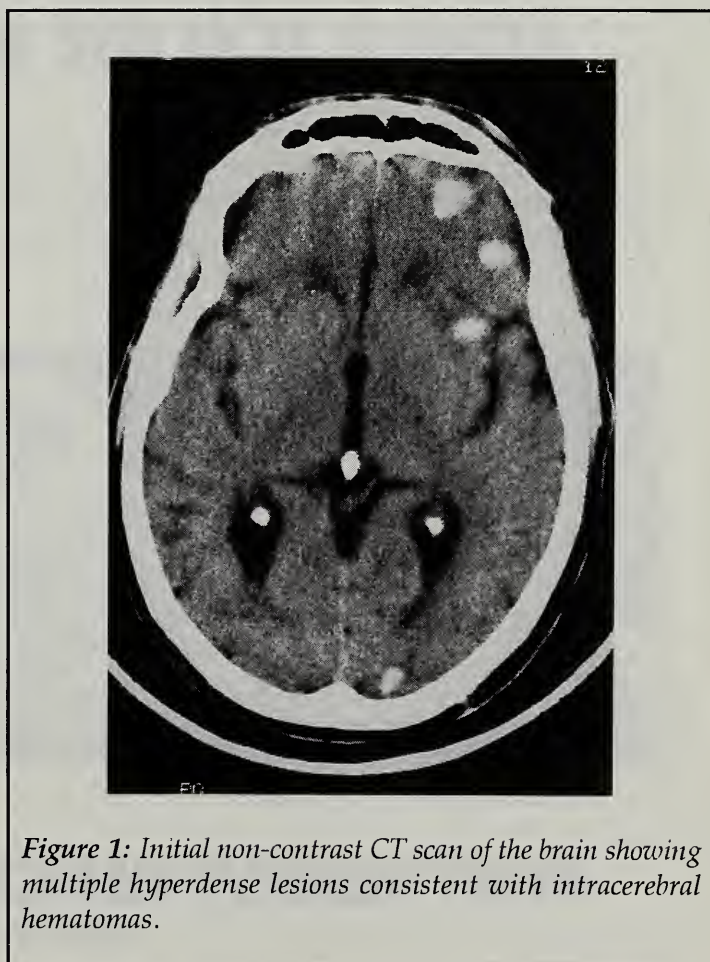


Figure 1: Initial non-contrast CT scan of the brain showing multiple hyperdense lesions consistent with intracerebral hematomas.

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** Dr. Harik is with the Department of Neurology at UAMS.

This patient's presentation offers several heuristic points. First, ECG abnormalities and high serum muscle enzymes⁴ are observed after generalized seizures. It is important to realize that these enzymes emanate from skeletal muscles and not from the heart. The combination of ECG abnormalities and the high serum muscle enzymes misled the patient's physicians to treat an acute myocardial infarction that did not exist. Second, our patient was markedly demented, a condition which escaped his physicians' notice because he was alone and postictal. We presume that this patient has cerebral amyloid angiopathy associated with dementia, because cerebral amyloid angiopathy is the most frequent cause that underlies multiple intracerebral lobar hemorrhages after rtPA.³ We strongly suggest that dementia should be considered a contraindication to the use of rtPA and other thrombolytic agents. Third, we believe that recent generalized seizures should also be a contraindication to thrombolytic therapy because these patients develop high arterial pressure during the seizure,⁵ and because hypertension predisposes to intracerebral hemorrhage in patients receiving rtPA.³

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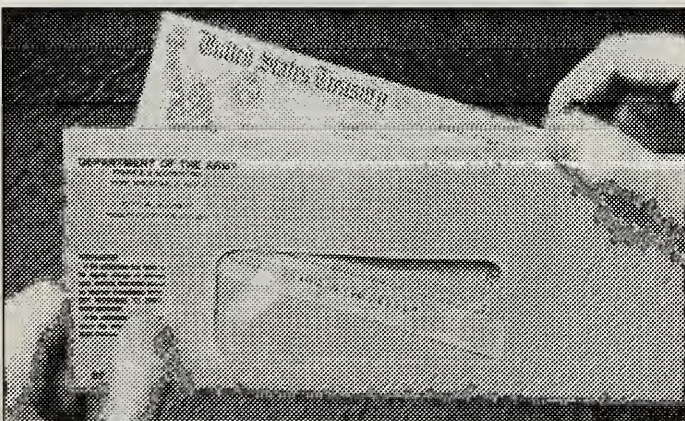
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Stark II: The Quagmire Thickens

David Ivers, J.D.*

After more than three years of work, the Health Care Financing Administration (HCFA) has finally issued the long-awaited Stark II regulations. Although they are only "proposed" at this point, they are having a dramatic effect, as evidenced by the plethora of seminars, articles, commentary and questions that have ensued since the release of the regs earlier this year (63 Fed. Reg. 1659; January 9, 1998).

Until now, all that physicians and their attorneys had to go on was the statutory language and the regulations implementing Stark I. The publication of the proposed Stark II regs is welcome in that they provide much needed guidance in some (but not all) of the murky areas. The bad news is that HCFA is generally taking a more restrictive view than even the Stark I regulations indicated. The proposed regs will require many physicians to restructure their business arrangements or scuttle them altogether.

Since its inception Stark has proved to be far more difficult to implement than anyone imagined. It regulates the unique way in which physicians practice medicine, an area in which even HCFA admits it lacks expertise. HCFA's staff has been overwhelmed with inquiries from physicians and their attorneys and has been unable to develop the regulations in a timely fashion. All of this is testament to the frustrating complexity of Stark, a law that is still evolving in response to the myriad real-life situations that have confronted the regulators.

The Stark law (named for Rep. Pete Stark of California) has gone into effect in stages and is now codified together at 42 U.S.C. Section 1395nn. Stark I went into effect January 1, 1992, but applied to only clinical lab services in the Medicare program. Stark II amended the law to add ten additional services and to include the Medicaid program. It went into effect on January 1, 1995. Although the proposed Stark II regulations took over three years to develop, the final guidelines are not expected for another three years or more. In light of that, health care attorneys are placing great reliance on the current version.

Some parts of the proposed regulations track the Stark I regs, while other parts contain needed clarifications, some revisions, and even some outright surprises. By necessity, what follows is only a general overview. Each situation is extremely fact-intensive and calls for careful consultation with an attorney.

Prohibited Relationships

If a physician (or an immediate family member) has a financial relationship with an entity, then the physician is prohibited from referring a Medicare or Medicaid patient to that entity for certain designated health services. The general principle is simple enough, but the devil is in the details.

"Financial relationship" is construed extremely broadly. It includes two general categories: (1) an *ownership or investment* interest in an entity through equity, debt or other means; and (2) *compensation arrangements* between the physician and an entity, meaning any salary or other remuneration, direct or indirect, in cash or in kind.

"Designated health services" are defined as follows:

1. Clinical and anatomic laboratory services.
2. Physical therapy services.
3. Occupational therapy services.
4. Radiology services and radiation therapy services and supplies.
5. Durable medical equipment and supplies.
6. Parenteral and enteral nutrients, equipment, and supplies.
7. Prosthetics, orthotics, and prosthetic devices and supplies.
8. Home health services.
9. Outpatient prescription drugs.
10. In-patient and out-patient hospital services.

If you violate this broad prohibition, the penalties are severe. They can include restitution; a civil penalty of \$15,000 for each improper claim; a civil penalty of \$100,000 for elaborate circumvention schemes; exclusion from Medicare and Medicaid; and a penalty of up to \$10,000 for each day for which you fail to meet HCFA reporting requirements.

The only way to get around this extremely broad

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prohibition is to fit within an exception. Stark has divided the exceptions into three categories: those that apply to both ownership and compensation arrangements; those that apply only to ownership arrangements; and those that apply only to compensation arrangements.

Exceptions to Both Ownership and Compensation Prohibitions

In-Office Ancillary Services. This is the most important exception, but it is also the most complicated. With the exception of parenteral and enteral nutrients, equipment and supplies and most durable medical equipment, all the designated health services can qualify for this exception. Specifically, the following three criteria must be satisfied:

1. The provider test. The services must be furnished by one of the following:

(i) The referring physician (either in a solo or group practice).

(ii) A physician who is a member of the same group practice as the referring physician. ("Member" means physician owners and employees.)

(iii) Technicians or other individuals who are directly supervised by the referring physician or another physician member of the same group practice as the referring physician.

2. The location test. The services must be furnished in one of the following locations:

(i) The same building in which the referring physician or another member of the same group practice furnishes routine physician services unrelated to the designated health services.

(ii) In a separate building where a group's designated health services are "centralized," meaning the location serves more than one of the group's offices. (However, lab services for a group may be provided in multiple locations without regard to the centralization requirement.)

3. The billing test. The services are billed by one of the following:

(i) The physician performing or supervising the service.

(ii) The physician's group under a billing number assigned to the group.

(iii) An entity that is wholly owned by the physician or the physician's group.

Physician Services. The referral prohibition does not apply to designated health services that are classified as "physician services" and performed or personally supervised by another physician in the same group practice as the referring physician. This would encompass aspects of the designated health services that involve physician diagnosis, therapy, surgery, consultations, and home, office, and institutional calls, e.g., the professional component of anatomic lab and radi-

ology services and certain clinical lab services. The main advantage to this limited exception is that it does not have the location requirement of the ancillary services exception; the service can be performed anywhere as long as it is performed or supervised by a physician in the same group practice.

Prepaid plans. The Stark law exempts services furnished by HMOs and other prepaid managed care organizations that contract with Medicare or Medicaid. Even though physicians typically contract with these organizations and sometimes have ownership interests in them, HCFA believes the risk-sharing nature of these organizations will prevent unnecessary referrals.

Exceptions to Ownership Prohibitions

The Stark law exempts the following from the definition of "financial relationship":

Publicly traded securities and mutual funds. Stark exempts stocks, bonds, notes, and other security interests in publicly traded companies with more than \$75 million in stockholder equity. It also exempts investments in mutual funds with total assets that exceed \$75 million.

Rural providers. This is an important exception to physicians who have clinics, labs or other entities in rural areas (an area outside of a Metropolitan Statistical Area). Stark exempts designated health services furnished in a rural area if "substantially all" (at least 75 percent) of the designated health services furnished by the entity are furnished to persons living in a rural area.

Hospitals. Stark exempts referrals of designated health services to a hospital in which a physician has invested if: (i) the physician is authorized to perform services at the hospital, and (ii) the physician's ownership interest is in the hospital itself and not merely a department or other subdivision of the hospital.

Exceptions to Compensation Prohibitions

One must keep in mind that virtually any oral or written agreement -- even a simple lease agreement or equipment rental -- constitutes a "financial interest" under Stark. Therefore, physicians must be careful to meet one of the following exceptions if there is a possibility of referrals for designated health services between the contracting parties.

Rental of office space. A lease agreement must meet the following conditions:

1. The lease agreement must be set out in writing and signed by the parties.

2. The lease must cover all of the premises leased between the parties and specify what those premises are. The space rented or leased must not exceed that which is reasonable and necessary for the legitimate business purposes of the lease or rental and is used exclusively by the lessee when being used by the lessee.

The Group Practice Dilemma

Nowhere does Stark pose more difficulties than in its requirements for a "group practice." Stark is willing to allow a physician to make money from in-house referrals only if the referrals are merely adjunct to the physician's regular practice.

Generally speaking, the only way to do this is to meet the all-important "in-office ancillary services exception" discussed elsewhere. The exception includes most of the "designated health services" covered by Stark. It is important whether you practice alone or in a group. However, if physicians in a group want to use this exception to make referrals to one another, they also have to meet Stark's definition of a "group practice." Otherwise, each physician is treated as a solo practitioner and must meet the ancillary services exception individually. In other words, each physician must have his or her office in the same building as the ancillary service; each must personally perform or directly supervise the performance of the service; and each must bill for services provided to his or her own patients. While this is burdensome enough for solo practitioners, it is completely contrary to the whole nature of a group practice.

That is why it is usually essential for a group to meet the technical defi-

nition of a "group practice." Then the physician members can refer to one another, can supervise the techs for one another's referrals, can locate their ancillary services in separate locations, and can let the group do the billing for everyone. But these benefits come with a price.

In order to qualify as a "group practice" within the meaning of Stark, the group must meet detailed patient-service thresholds. These are designed to ensure that the group is comprised of physicians who are actually practicing medicine in the group and are not included just to generate referrals in some type of joint venture.

Also, Stark requires that the overhead expenses and income from the group be distributed according to methods that indicate that the practice is a "unified business." This means *pooling* of expenses and revenues. A group cannot allocate expenses and income as if each satellite office (or each physician) were a separate enterprise.

Stark does allow members to share "overall profits of the group." These overall profits can include the profits from the "designated health services," but they cannot be divided in a manner that relates directly to who made the referrals. Instead, the regulations suggest such methods as "an even split, a

physician's investment in the group, the number of hours a physician in general devotes to the group, or the difficulty of a physician's work." The regulations caution against "subpooling" the profits at some level smaller than the overall group, e.g. pooling based on specialty or (more blatantly) a designated health service. According to HCFA: "We believe that the narrower the pooling, the more likely it will be that a physician will receive compensation for his or her own referrals."

Stark also allows for physicians in a group to be paid a productivity bonus "based on services he or she has personally performed." However, many physicians -- and their attorneys -- were surprised to find out that HCFA now says this bonus cannot include work on the physician's own referrals -- only on referrals from *other* members of the group.

The saving grace for many groups may be HCFA's acknowledgment that these prohibitions only apply to referrals involving Medicare and Medicaid patients. A group may pay physicians based on their referrals of non-Medicare/Medicaid patients, provided it carefully documents the separate distribution system.

3. The lease must provide for a term of rental of at least one year.

4. The rental charges over the term of the lease must be set in advance and consistent with fair market value, and the charges must not be determined in a manner that takes into account the volume or value of any referrals or other business generated between the parties.

5. The lease must be commercially reasonable even if no referrals were made between the parties.

Rental of Equipment. These arrangements must meet the following requirements:

1. The agreement must be set out in writing and signed by the parties.

2. The agreement must specify all of the equip-

ment covered. The aggregate rental must not exceed that which is reasonable and necessary for the legitimate business purpose of the agreement and must be used exclusively by the lessee.

3. The agreement must provide for a term of rental of at least one year.

4. The rental charges over the term of the agreement must be set in advance and consistent with fair market value, and the charges must not be determined in a manner that takes into account the volume or value of any referrals or other business generated between the parties.

5. The agreement must be commercially reasonable even if no referrals were made between the parties.

Employment relationships. Stark specifically exempts

bona fide employment arrangements if the following conditions are met:

1. The employment is for identifiable services.
2. The amount the employee is paid is consistent with the fair market value of the services.
3. The pay does not take into account the volume or value of any referrals by the employee or other business generated between the parties.
4. The employee's salary is based on an agreement that would be commercially reasonable even if no referrals were made to the employer.

Personal service arrangements. This exception can cover a variety of arrangements including those for independent contractors, management services, and garden-variety contracts with health plans and payers. The contracts must meet the following conditions:

1. The agreement must be set out in writing and signed by the parties.
2. The agreement must cover all of the services the independent contractor agrees to provide and specify what those services are. If there is more than one agreement, they must cross-reference one another.
3. The term of the agreement must be for not less than one year.
4. The aggregate services the independent contractor agrees to provide must not exceed those which are reasonably necessary to accomplish the legitimate business purposes of the arrangement.

5. The aggregate compensation paid to the contractor over the term of the agreement must be set in advance, consistent with fair market value in arms-length transactions, and not determined in a manner that takes into account the volume or value of any referrals or other business generated between the parties (physician incentive plans involving withholds, capitation, bonuses, etc. being an exception).

Physician recruitment. Stark provides an exception for payments and other compensation by a hospital to a physician to induce the physician to relocate to the geographic area served by the hospital and become a member of the hospital's staff, provided all of the following conditions are met:

1. The arrangement is set out in writing and signed by both parties.
2. The arrangement is not conditioned on the physician's referral of patients to the hospital.
3. The hospital does not determine (directly or indirectly) the amount of the remuneration to the physician based on the volume or value of any referrals by the physician or other business generated between the parties.
4. The physician is not precluded from establishing staff privileges at another hospital or referring business to another entity.

Discounts. In a confusing new exception, HCFA states that it will not consider discounts to constitute

compensation as long as the physician passes on the discount in full to the patient or third-party payer, including Medicare. HCFA indicates in the preamble to the regs that this requirement does not affect the purchase of clinical lab services since federal law does not allow the ordering physician to bill Medicare. Also, if the entity providing a discount is not in a position to receive referrals of designated health services from physicians, this requirement would not seem to apply.

Payments by a physician. Because "financial relationship" is defined so broadly, even routine payments by a physician to another provider for lab services or any other items or services would constitute "compensation." Therefore, Stark creates an exception for such payments as long as they are priced at fair market value.

General fair market value exception. This is a new exception that HCFA has created for compensation arrangements that do not fit into the other categories. It follows the same pattern as most of the others:

1. The agreement must be set out in writing and signed by the parties. The agreement must cover only identifiable items or services. The agreement must cover all of the items and services to be provided between the parties, or if there is more than one agreement between the parties, the agreements must cross-reference one another.

2. The agreement must specify the timeframe for the arrangement, which can be for any period of time and contain a termination clause, provided the parties enter into only one arrangement for the same items or services during the course of a year. An arrangement made for less than one year may be renewed any number of times if the terms of the agreement and the compensation for the same items or services do not change.

3. The agreement must specify the compensation that will be provided under the arrangement. The compensation must be set in advance, consistent with fair market value, and not be determined in any manner that takes into account the volume or value of any referrals or other business generated between the parties.

4. The agreement must involve a transaction that is commercially reasonable and furthers the legitimate business purposes of the parties.

5. It must be in compliance with federal Antikickback provisions.

Reporting Requirements

Stark also mandates that physicians disclose their financial relationships and that those who want to qualify as a "group practice" submit a written attestation to the local carrier. However, the requirements are not being enforced at this time since HCFA has not yet developed the reporting forms.

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Jack McKee, M.D.*
Thomas D. Conley, M.D.**
J. David Talley, M.D.*

The Eisenmenger Syndrome

Eisenmenger's syndrome is defined as pulmonary hypertension with a reversed or bi-directional shunt between the pulmonary and systemic circulation.¹ It is a vivid example of the need for isolated right and left sided circulatory systems at the level of the heart and great vessels. Fundamentally, it represents pulmonary injury and compensation in response to a circulatory defect that exposes the pulmonary circulation to greatly elevated hydrostatic pressures. After time, irreversible changes occur in the pulmonary vasculature, which produce a degree of pulmonary hypertension sufficient to reverse the circulatory shunt, thus producing the Eisenmenger syndrome. Patients present at varying ages with some or all of the following symptoms: cyanosis, polycythemia, clubbing, syncope, hemoptysis, and ventricular failure. In this article, we review the etiologies, pathophysiology, and management of patients with Eisenmenger's syndrome.

We recently cared for a patient with Eisenmenger's syndrome and review the etiology, pathophysiology, diagnostic testing, and management options of this critical condition.

Patient Presentation

History. The patient is a 51-year old female admitted for evaluation of adult congenital heart disease (Table 1). She reported that as a child she was diagnosed with "a hole in my heart," but did not have corrective surgery and afterwards rarely visited doctors. Over the years, she has done reasonably well except for occasional chest pain for which she was seen and evaluated beginning over ten years ago. At that time, she was told that "nothing could be done" about her heart defect. Upon admission, she complained of increasing fatigue, dyspnea, cyanosis with minimal effort, and joint pain. Her last episode of chest oc-

curred more than one month prior to admission.

Current medications included: digoxin 0.125 mg per day, famotidine 20 mg BID, sublingual nitroglycerin PRN, and non-steroidal inflammatory agents for joint pain.

She was one of 12 children and none of her siblings had congenital heart disease. She is married and has one son who is healthy.

Physical Examination. The patient is a thin female with cyanosis of her lips, tongue, and distal extremities. She has a soft 2/6 holosystolic murmur heard best at the left upper sternal border with a loud second heart sound. Her lungs were clear to auscultation, and the abdominal exam was unremarkable. There was clubbing of the fingers, and her thumbs were similar in appearance to her other fingers (Figure 1).

Laboratory Examination. Arterial blood gases were: pH 7.45, pCO₂ 33, pO₂ 44, HCO₃ 23.7, O₂ sat 76% on room air. The hemoglobin was 18.1 gm/dl and the hematocrit was 57.7%. The electrocardiogram showed right ventricular hypertrophy. An echocardiography revealed a large, subaortic ventricular septal defect with mostly right-to-left shunting consistent with Eisenmenger's syndrome.

Etiologies of the Eisenmenger Syndrome

The *Eisenmenger complex* is defined as pulmonary hypertension, ventricular septal defect (VSD), and right to left shunting of blood. This complex is named for Victor Eisenmenger who in 1897 first described a patient with cyanosis, a VSD, and right ventricular enlargement.²

Eisenmenger's syndrome, coined by Wood in 1958, includes circulatory shunts at the ventricular, atrial, or aorto-pulmonary levels.¹ A wide array of anatomical defects may produce this syndrome. The frequency with which specific congenital lesions give rise to the Eisenmenger syndrome is dependent upon their incidence in the population. To this end, ventricular and

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Table 1: Complete Cardiac Diagnosis

Etiology:	Congenital ventricular septal defect
Anatomy:	Echocardiogram; Normal LV internal dimensions, large, subaortic VSD. Normal LA dimensions, normal RA and RV dimensions. Eustachian valve seen in RA.
Physiology:	ECG shows S1-S2-S3 pattern with right ventricular hypertrophy. Echocardiogram; mostly right-to-left shunt by color flow imaging and color flow Doppler. Thickened PV with typical motion of pulmonary hypertension. Thickened septum with systolic flattening suggestive of RV pressure overload. Ejection fraction 50-55%.
Functional:	Class III-IV
Objective:	Moderate to severe disease

Abbreviations: LA = left atrium, LV = left ventricle, PV = pulmonary valve, RA = right atrium, RV = right ventricle, VSD = ventricular septal defect

atrial septal defects, and patent ductus arteriosus are the most commonly described etiologies. In 201 patients with Eisenmenger's syndrome, Saha and colleagues reported a VSD in 67 patients (33%), atrial septal defect in 60 patients (30%), and a patent ductus arteriosus in 29 patients (14%).³ Not all patients with these cardiovascular malformations will develop this syndrome. Clearly, there are factors other than the anatomical substrate which are essential for the progression to Eisenmenger's syndrome.

Pathophysiology

The Eisenmenger syndrome is a reaction to an anatomical defect. A problem arises, however, in that the anatomical possibilities that can generate Eisenmenger's syndrome are diverse, and each is somewhat different in terms of physiology. But in a general sense, all have one very important critical feature, specifically, a shunt with increased pulmonary blood flow.

Central to the Eisenmenger syndrome is the occurrence of pulmonary hypertension that may reach systemic levels. It should be pointed out that although increased pulmonary blood flow likely contributes to the pathogenesis of pulmonary hypertension, it should not be thought of as the sole cause. From data re-



Figure 1: Photograph of the right hand of our patient illustrating "digitalization" of the thumb, a feature characteristic of Holt-Oram syndrome. The deep cyanosis of the fingers is characteristic of Eisenmenger's syndrome.

ported in the Second Natural History Study of Congenital Heart Defects (NHS-2), patients with a VSD were stratified using a combination of pulmonary-to-systemic flow (Q_p/Q_s), main pulmonary artery mean pressure (MPAMP), and pulmonary-to-systemic relative resistance ratio (R_p/R_s). Eisenmenger's syndrome was defined as MPAMP >20mm Hg, Q_p/Q_s <1.2 and R_p/R_s >0.7. It was found that greater than 50% of patients managed medically with VSD and R_p/R_s elevation (0.2-0.69) later developed Eisenmenger's syndrome.⁴

The vascular changes, which give rise to secondary pulmonary hypertension in congenital heart disease, have been the subject of investigation for many years. Normally, there is a dramatic reduction in pulmonary vascular resistance after birth owing to an expansion of alveoli and loss of the uteroplacental circulation.⁵ The muscular media of pulmonary arterioles then begins to thin which continues throughout the first several months of life. In the face of significant cardiac shunts however, this medial thinning is quickly arrested. In fact, hypertrophy and hyperplasia of the

media ensues which is the earliest manifestation of pulmonary arterial disease in these patients.⁶ Intimal fibrosis, plexiform lesions, dilation lesions, fibrinoid necrosis, and arteritis ultimately develop to varying degrees, which in turn leads to increased and irreversible pulmonary hypertension.

As pulmonary hypertension begins to develop, the blood shunted from left to right begins to meet ever increasing resistance from the pulmonary vasculature. Eventually, the increase in pulmonary vascular resistance and hypertrophied and less compliant right ventricle leads to a reversal of the shunt from right to left producing symptoms referable to the Eisenmenger syndrome.

Diagnosis

The individual physical findings that characterize the Eisenmenger syndrome are commonly found in other maladies. However, the combination of certain findings on examination should prompt the clinician to suspect Eisenmenger's physiology. Central cyanosis is usually the most striking feature and is found in the majority of patients. Harsh systolic murmurs typically are not a feature of this syndrome, as the intensity of the murmur from the underlying defect diminishes as resistance to flow increases. Indeed, many patients with Eisenmenger's syndrome do not have an audible murmur. The second heart sound becomes accentuated with pulmonary hypertension as pressure in the pulmonary circuit rises. There is also diminished splitting of the second heart sound as the pulmonary and aortic valves close under similar pressures. Digital clubbing, also a feature of Eisenmenger's syndrome, is found in most cases and is thought to be related to hypoxemia. A right ventricular heave is common.

The most common laboratory abnormality found in patients with Eisenmenger's syndrome is polycythemia and the hematocrit may exceed 60%.

Echocardiography and cardiac catheterization are undoubtedly the most sensitive means of diagnosing the Eisenmenger syndrome. In addition to identifying the underlying cardiac defect, information such as shunt fraction, pulmonary artery pressures, and pulmonary-to-systemic pressure ratios can be measured. This information is critical in making decisions with respect to surgical versus medical management.

Management

The management of patients with Eisenmenger's syndrome poses significant challenges. The diagnosis itself implies an element of irreversibility, and therapeutic options are therefore limited. Beginning in the early 1980s, combined heart-lung transplantation has been performed for some patients with Eisenmenger's syndrome. This procedure was considered the only "curative" treatment for many years thereafter. Since

that time, there have been several reports of both single and double isolated lung transplants with repair of the underlying cardiac defect. One of the more serious potential problems associated with isolated lung transplantation in these patients is that of developing "suicide right ventricle."⁷ This occurs prior to remodeling as the hypertrophied right ventricular walls act as a dynamic outflow obstruction during systole.⁸ This is a possibility in the first few months following transplant until the right ventricle approaches normal dimensions. Although there are significant risks with either combined heart-lung or isolated lung transplantation, many patients with this syndrome have no acceptable alternative.

Pharmacological management in patients with Eisenmenger's syndrome is targeted primarily at controlling symptoms. In addition to phlebotomy for polycythemia and the treatment of congestive heart failure by traditional means, little can be offered to these patients with respect to medical management. In a study of patients with Eisenmenger's syndrome, Wong et al. reported an improvement in exercise tolerance and resting oxygen saturation in patients treated with nifedipine.⁹ There have been many pharmacological studies in patients with both primary and secondary pulmonary hypertension, but few have included patients with Eisenmenger's syndrome. It is unlikely however, that medications will ever surpass or even approach the advantages of transplantation in these patients.

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State Health Watch

Information provided by the Arkansas Department of Health, Division of Epidemiology

Management of Animal Bites

All individuals bitten by an animal should be evaluated by their physician as to the need for wound treatment and rabies prophylaxis. Prophylaxis may be deferred if the biting animal is a dog or cat, and is available for quarantine. This is possible since a dog or cat with rabies encephalitis will always become symptomatic and die within 10 days of the bite. If the dog or cat remains healthy for 10 days, the animal was not rabid at the time of the bite and prophylaxis is unnecessary. There is no reliable quarantine period for wildlife, since many animals may carry and transmit rabies virus for unknown periods of time without having symptoms of rabies. Animals other than dogs or cats must be sacrificed and the head submitted to the Arkansas Department of Health (ADH) Laboratory for fluorescent antibody (FA) testing. A negative FA test is evidence that rabies virus is not present in the brain and saliva and eliminates the necessity for post exposure treatment.

The ADH is open 24 hours a day to receive specimens. All practicing veterinarians and ADH county health units have insulated shipping containers and will assist in the proper packing and shipping of rabies suspect heads.

Since 1980, 21 of the 36 cases of human rabies diagnosed in the U.S. have been associated with variants of rabies virus associated with bats. The silver-haired bat has accounted for 15 of the 21 bat related deaths. A definite history of a bat bite with a resulting wound has been documented in only one of the 21 cases. In 8 cases, physical contact with a bat was reported. A history of bat contact could not be established for the remainder of cases.

These data suggest that seemingly inapparent physical contact with bats may result in virus transmission, even without a clear history of a bite. In all instances of bat-human contact in which rabies transmission is a possibility, the bat in question should be collected, if possible and submitted for testing. Rabies prophylaxis is recommended for all persons with a bite, scratch or mucus membrane exposure to a bat unless the bat is available for testing and has a negative labo-

ratory test. The inability of healthcare providers to elicit information surrounding potential exposures may be influenced by the limited injury inflicted by a bat bite (in comparison with lesions inflicted by terrestrial carnivores) or by circumstances that hinder accurate recall of events. Therefore, prophylaxis is also appropriate even in the absence of a demonstrable bite or scratch, in situations in which there is a reasonable possibility that such contact occurred (e.g., a sleeping person awakes to find a bat in the room or an adult witnesses a bat in the room with a previously unattended child or a mentally disabled person). This recommendation, used in conjunction with current Advisory Committee for Immunization Practices guidelines, should maximize a healthcare provider's ability to respond to situations where accurate exposure histories may not be obtainable and minimize inappropriate prophylaxis.

Lab Confirmed Rabies in Arkansas by County

County	1997					Total
	Bat	Cat	Dog	Fox	Skunk	
Baxter	0	0	1	0	2	3
Benton	0	1	0	0	11	12
Boone	2	0	0	0	0	2
Carroll	0	0	1	0	0	1
Conway	0	0	1	0	0	1
Craighead	0	0	0	0	1	1
Crawford	1	0	0	0	0	1
Faulkner	1	0	0	0	0	1
Fulton	0	0	2	0	2	4
Garland	2	0	0	0	0	2
Greene	1	0	0	0	0	1
Hot Spring	0	0	0	0	1	1
Howard	0	0	0	0	1	1
Jefferson	2	0	0	0	0	2
Lawrence	0	0	0	0	1	1
Logan	1	0	0	0	3	4
Madison	0	1	0	1	3	5
Miller	1	0	0	0	1	2
Newton	0	0	0	0	1	1
Pike	0	0	0	0	1	1
Polk	1	0	0	0	0	1
Pope	1	0	0	0	0	1
Pulaski	2	0	0	0	0	2
Saline	1	0	0	0	0	1
Scott	0	0	0	0	2	2
Sebastian	0	1	0	0	0	1
Washington	0	0	0	0	1	1
Total	16	3	5	1	31	56

Treatment with the Human Diploid Cell Vaccine (HDCV) requires five 1-ml. injections in the deltoid muscle on days 0, 3, 7, 14 and 28. The vaccine is lyophilized, and each vial is recombined with 1 ml. of diluent immediately prior to injection. Human Rabies Immune Globulin (HRIG) is given on the first day of treatment at the rate of two ml. per 33 pounds of body weight. If the bite is in a fleshy part of the body, the HRIG should be infiltrated around the wound; otherwise, the HRIG is given in the gluteal muscle. HRIG furnishes immediate antibody protection and may be the most important part of the treatment.

We have not experienced any serious systemic or neuromuscular reactions to HDCV, although about 20% of patients report erythema, pain, swelling or itching at the injection site. Serologic testing to assure a protective antibody response is no longer necessary except in those patients whose immune response may be compromised. 99.9% of persons tested (2999 of 3000)

developed protective antibody levels.

During 1997, approximately 183 Arkansans were administered post-exposure treatment after being bitten by a rabid or suspected rabid animal. Of the 1,237 total specimens from Arkansas submitted for rabies testing, 56 were positive for rabies virus (see table).

The ADH Veterinary Public Health Office provides consultation on the necessity for post exposure rabies treatment for all animal bites. Vaccine is stocked by the ADH pharmacy and will be released to physicians on request. Vaccine is provided at cost and the patient is billed directly if requested. Vaccine is never withheld because of a patient's inability to pay. For consultation or vaccine requests, contact Dr. Thomas McChesney at (501)661-2597 during normal business hours or (501)982-5697 (home) after hours.

Deliveries of rabies vaccine are made by United Parcel Service, commercial bus or air, whichever will provide the most timely service.

Reported Cases of Selected Diseases in Arkansas Profile for April 1998

The three-month delay in the disease profile for a given month is designed to minimize any changes that may occur due to the effects of late reporting. The numbers in the table reflect the actual disease onset date, if known, rather than the date the disease was reported.

Disease Name	Total Reported Cases YTD 1998	Total Reported Cases YTD 1997	Total Reported Cases YTD 1996	Total Reported Cases 1997	Total Reported Cases 1996
Campylobacteriosis	35	41	47	175	241
Giardiasis	39	58	39	220	182
Salmonellosis	47	54	75	445	455
Shigellosis	48	37	25	273	176
Hepatitis A	22	99	195	223	500
Hepatitis B	25	30	36	106	93
Hepatitis C	1	2	4	5	7
Meningococcal Infections	17	22	20	38	35
Viral Meningitis	3	9	11	26	38
Ehrlichiosis	0	1	0	22	7
Lyme Disease	2	4	7	27	27
Rocky Mtn Spotted Fever	5	3	2	31	22
Tularemia	2	3	5	24	24
Measles	0	0	0	0	0
Mumps	0	0	0	3	1
Gonorrhea	1094	1538	1614	4388	5050
Syphilis	89	199	318	394	706
Pertussis	11	3	3	60	14
Tuberculosis	39	48	62	200	225

For a listing of reportable diseases in Arkansas, call the Arkansas Department of Health, Division of Epidemiology, at (501) 661-2893.

Distribution Of Cases 1983 through April 12, 1998

**HIV Cases
(including AIDS)
Reported**

- 1 to 3
- 4 to 49
- 50 to 99
- 100 to 1,333

Demographics		83-90	1991	1992	1993	1994	1995	1996	1997	1998	Total	%
SEX	Male	877	374	373	338	344	323	264	267	108	3,268	81
	Female	131	84	74	89	89	89	79	94	26	755	19
AGE	Under 5	12	8	5	3	5	2	1	9	1	46	1
	5-12	7	1	0	0	0	1	0	0	0	9	0
	13-19	29	18	25	11	21	11	21	19	4	159	4
	20-24	155	43	48	59	58	44	29	38	16	490	12
	25-29	249	100	99	106	80	73	59	54	21	841	21
	30-34	233	114	106	89	93	97	84	76	27	919	23
	35-39	161	86	63	75	69	80	70	66	32	702	17
	40-44	81	47	39	45	48	46	35	49	16	406	10
	45-49	41	19	25	16	27	22	18	33	10	211	5
	50-54	15	14	14	10	10	17	14	8	4	106	3
	55-59	13	3	12	6	6	6	6	6	0	58	1
60-64	3	2	6	5	9	7	1	2	2	37	1	
65 and older	9	3	5	2	7	6	5	1	1	39	1	
RACE	White	675	279	280	264	243	253	187	183	64	2,428	60
	Black	326	176	161	158	179	151	145	162	61	1,519	38
	Hispanic	2	3	4	1	7	3	6	5	5	36	1
	Other/Unknown	5	0	2	4	4	5	5	11	4	40	1
RISK	Male/Male Sex Injection Drug User (IDU)	558	242	247	231	211	175	145	130	35	1,974	49
	Male/Male Sex + IDU	149	90	71	62	71	61	33	50	6	593	15
	Heterosexual (Known Risk)	115	32	37	28	24	29	26	17	3	311	8
	Transfusion	106	64	65	96	98	69	72	63	13	646	16
	Perinatal	22	8	9	1	2	4	2	0	0	48	1
	Hemophiliac	12	8	5	3	5	3	1	9	1	47	1
	Undetermined	24	5	6	2	3	5	0	1	2	48	1
		22	9	7	4	19	66	64	91	74	356	9
TOTAL		1,008	458	447	427	433	412	343	361	134	4,023	100

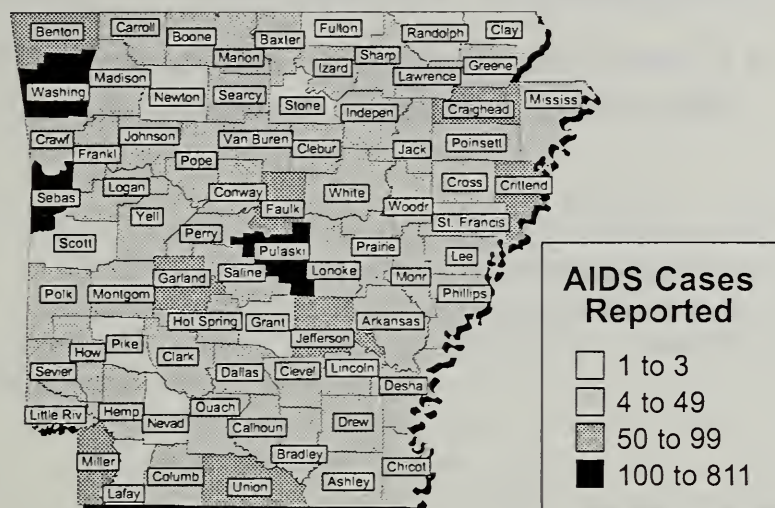
HIV Cases By County

County	1983- 4/12/98	May 97- Apr 98
Arkansas	20	*
Ashley	19	0
Baxter	32	5
Benton	94	6
Boone	31	0
Bradley	15	*
Calhoun	8	*
Carroll	39	*
Chicot	19	*
Clark	22	6
Clay	*	0
Cleburne	16	*
Cleveland	*	0
Columbia	24	5
Conway	22	*
Craighead	78	14
Crawford	35	*
Crittenden	176	18
Cross	23	*
Dallas	8	0
Desha	20	*
Drew	14	*
Faulkner	63	*
Franklin	8	*
Fulton	*	0
Garland	152	19
Grant	4	*
Greene	22	0
Hempstead	24	4
Hot Spring	23	*
Howard	9	0
Independence	29	*
Izard	8	*
Jackson	10	*
Jefferson	170	12
Johnson	11	0
Lafayette	6	0
Lawrence	12	0
Lee	16	4
Lincoln	4	0
Little River	14	*
Logan	9	4
Lonoke	25	*
Madison	*	0
Marion	4	0
Miller	99	10
Mississippi	52	9
Monroe	16	*
Montgomery	7	*
Nevada	5	*
Newton	7	*
Ouachita	35	*
Perry	5	0
Phillips	43	7
Pike	*	0
Poinsett	16	*
Polk	12	0
Pope	58	4
Prairie	6	0
Pulaski	1,333	101
Randolph	5	0
St. Francis	82	7
Saline	28	4
Scott	*	0
Searcy	5	0
Sebastian	220	15
Sevier	10	0
Sharp	10	0
Stone	*	0
Union	129	14
Van Buren	5	0
Washington	297	20
White	38	4
Woodruff	4	0
Yell	13	*
Prisons	123	22

* Case numbers of 1-3 are not reported.

AIDS In Arkansas

Distribution Of Cases 1983 through April 12, 1998



Arkansas Department of Health HIV/AIDS Surveillance Program

Demographics		83-90	1991	1992	1993	1994	1995	1996	1997	1998	Total	%
SEX	Male	393	171	243	325	253	237	211	179	55	2,067	86
	Female	40	25	33	63	42	35	55	46	10	349	14
AGE	Under 5	8	6	2	2	1	2	0	8	1	30	1
	5-12	2	1	0	0	0	2	0	0	1	6	0
	13-19	4	3	2	4	3	1	3	2	1	23	1
	20-24	33	14	14	31	22	11	14	11	3	153	6
	25-29	99	42	65	78	45	46	46	28	7	456	19
	30-34	106	42	70	96	80	74	75	51	11	605	25
	35-39	85	37	55	77	52	49	54	55	17	481	20
	40-44	39	33	27	48	40	35	37	36	11	306	13
	45-49	26	6	22	26	22	17	21	20	8	168	7
	50-54	9	5	7	10	12	15	4	6	5	73	3
	55-59	9	4	8	8	5	6	7	4	0	51	2
	60-64	4	1	2	5	10	5	1	1	0	29	1
	65 and older	9	2	2	3	3	9	4	3	0	35	1
RACE	White	325	132	200	264	189	174	144	131	38	1,597	66
	Black	103	63	72	120	103	95	116	88	22	782	32
	Hispanic	1	1	3	3	2	3	4	3	5	25	1
	Other/Unknown	4	0	1	1	1	0	2	3	0	12	0
RISK	Male/Male Sex Injection Drug User (IDU)	254	114	175	229	162	138	124	93	20	1,309	54
	Male/Male Sex + IDU	44	29	41	68	47	48	28	42	10	357	15
	Heterosexual (Known Risk)	68	21	27	29	25	26	24	10	2	232	10
	Transfusion	25	11	20	52	41	35	59	38	6	287	12
	Perinatal	20	8	5	1	4	4	3	0	0	45	2
	Hemophiliac	8	6	2	2	1	3	0	8	1	31	1
	Undetermined	7	5	4	5	6	7	1	0	2	37	2
	Undetermined	7	2	2	2	9	11	27	34	24	118	5
	TOTAL	433	196	276	388	295	272	266	225	65	2,416	100

NOTE: County of residence may change from date of HIV test to date of AIDS diagnosis.

AIDS Cases By County

County	1983-4/12/98	May 97-Apr 98	Case Rate Per 100,000
Arkansas	8	0	0.0
Ashley	15	0	0.0
Baxter	23	*	3.2
Benton	75	4	4.1
Boone	24	0	0.0
Bradley	12	*	17.0
Calhoun	7	*	17.2
Carroll	24	*	5.4
Chicot	11	0	0.0
Clark	12	*	9.3
Clay	*	0	0.0
Cleburne	10	*	15.5
Cleveland	4	0	0.0
Columbia	17	*	7.8
Conway	15	*	5.2
Craighead	50	5	7.3
Crawford	28	*	4.7
Crittenden	92	12	24.0
Cross	11	0	0.0
Dallas	6	*	10.4
Desha	11	*	11.9
Drew	7	0	0.0
Faulkner	50	*	3.3
Franklin	6	*	13.4
Fulton	*	0	0.0
Garland	91	9	12.3
Grant	*	0	0.0
Greene	12	0	0.0
Hempstead	12	*	4.6
Hot Spring	17	*	3.8
Howard	6	0	0.0
Independence	17	*	6.4
Izard	8	*	26.4
Jackson	4	0	0.0
Jefferson	94	5	5.8
Johnson	7	0	0.0
Lafayette	*	*	10.4
Lawrence	12	*	5.7
Lee	10	*	23.0
Lincoln	7	*	21.9
Little River	7	*	14.3
Logan	9	*	14.6
Lonoke	23	*	2.5
Madison	4	0	0.0
Marion	4	0	0.0
Miller	55	8	20.8
Mississippi	20	*	5.2
Monroe	7	*	8.8
Montgomery	5	0	0.0
Nevada	*	0	0.0
Newton	*	0	0.0
Ouachita	21	0	0.0
Perry	4	0	0.0
Phillips	21	*	6.9
Pike	*	0	0.0
Poinsett	8	0	0.0
Polk	9	0	0.0
Pope	29	*	4.4
Prairie	6	*	10.5
Pulaski	811	80	22.9
Randolph	*	0	0.0
St. Francis	36	*	7.0
Saline	19	*	3.1
Scott	*	0	0.0
Searcy	5	0	0.0
Sebastian	134	9	9.0
Sevier	8	0	0.0
Sharp	8	0	0.0
Stone	*	0	0.0
Union	72	5	10.7
Van Buren	4	0	0.0
Washington	179	12	10.6
White	24	6	11.0
Woodruff	4	0	0.0
Yell	10	*	11.3
Prisons	32	0	N/A

* Case numbers of 1-3 are not reported.



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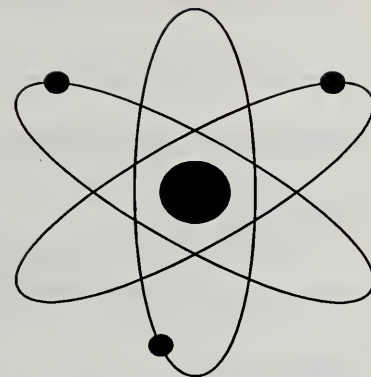
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Radiological Case of the Month

Steven R. Nokes, M.D., Editor



Author

Kenneth V. Robbins, M.D.

John Baker, M.D.

Wendall Pahls, M.D.

Steven R. Nokes, M.D.

History:

A 28-year-old female presented with lower midline abdominal pain. The physical examination was significant for a palpable mass in the lower midline just above the symphysis within a scar from previous cesarean section. The laboratory studies were unremarkable. A CT scan of the abdomen was performed. (Figure 1)



Figure 1: CT scan of the lower abdomen.

Endometriosis

Diagnosis: Endometriosis.

Findings:

The CT scan demonstrates a ring-enhancing lower midline abdominal wall mass, which involved the right and left aspects of the rectus abdominal muscle.

Discussion:

Endometriosis may occur in extrapelvic sites including bowel, spleen, kidney, diaphragm, lung, extremities, and abdominal wall. Incisional endometriomas have been reported to develop in one percent of women following hysterectomy. Incisional endometriosis may be due either to direct transplantation of endometrial cells at the time of the procedure or to metaplasia of peritoneal fragments incorporated into the incision at the time of surgery.

The diagnosis of endometrioma of a cesarean scar is suggested if the symptoms are cyclic or is associated with the patient's menstrual cycle. The differential diagnosis of a mass appearing in a healed abdominal incision should include suture granuloma, hernia, sebaceous cyst, hematoma, abscess or phlegmon, and neoplasm such as lymphoma, sarcoma, desmoid, or metastasis.

CT is an excellent method for the evaluation of abdominal wall disorders. MRI may show characteristic findings due to iron in the hemosiderin deposits in an endometrioma. However, surgical excision is the method of choice for diagnosis and treatment of this lesion.

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Sedaros, Robert Smith, Orthopedics. Medical Education, University of Florida College of Medicine, Gainesville, 1998. Internship/Residency, UAMS.

Stovall, Stephanie Howard, Pediatrics. Medical Education, UAMS, 1998. Residency, UAMS.

Stuckey, Robert Lloyd, Radiology. Medical Education, UAMS, 1998. Internship/Residency, UAMS.

Tilley, James Bradley, Internal Medicine/Pediatrics. Medical Education, UAMS, 1998. Internship/Residency, UAMS.

Wiedower-Lamb, Amy C., Obstetrics/Gynecology. Medical Education, UAMS, 1998. Residency, UAMS.

Things To Come

July 17 - 18, 1998

Clinical Allergy for the Practicing Physician. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

July 26 - 29, 1998

The Seventh National Alzheimer's Disease Education Conference: *Creating Opportunities, Making Connections.* Indianapolis Convention Center, Indianapolis, Indiana. Sponsored by the National Alzheimer's Association and the Central Indiana Chapter of the Association. For more information, call 312-335-5790.

September 25-27, 1998

Comprehensive Gynecology: A Clinical Update for the Practicing Physician. Crowne Plaza Manhattan, New York, New York. Sponsored by the Center for Bio-Medical Communication, Inc. For more information, call 201-385-8080 ext. 26.

October 1 - 3, 1998

Contemporary Cardiothoracic Surgery. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

October 14 - 18, 1998

1998 Infectious Disease Board Review: A Comprehensive Review for Board Preparation. Ritz-Carlton Hotel, Tysons Corner, McLean, Virginia. For more information, call the Center for Bio-Medical Communication, Inc., at 201-385-8080, extension 26.

October 15 - 16, 1998

24th Annual Symposium on Obstetrics & Gynecology. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

October 17, 1998

Urinary Incontinence and Female Urology. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

October 30 - 31, 1998

3rd Annual Fingers to Toes: *Comprehensive Orthopaedic Review Course for Primary Care Physicians.* Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

December 12, 1998

Contemporary Management of Acute Myocardial Infarction. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

Arkansas Foundation for Medical Care 1998 Quarterly Video Conferences:

Video conferences, Third Thursday of the month, once a quarter. Time: 12 noon to 1:30 p.m. Dates: August 20 and November 19. Location: UAMS education building/AHECs and Rural Hospital Affiliates.

For more information,
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at 501-649-8501, ext. 203.

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August 25, 1998

Annual Meeting of the Arkansas Society of Parenteral and Enteral Nutrition - UAMS Walton Auditorium. Sponsored by UAMS College of Medicine. For more information, call (501) 661-7962.

Recurring Education Programs

The following organizations are accredited by the Arkansas Medical Society to sponsor continuing medical education for physicians. The organizations named designate these continuing medical education activities for the credit hours specified in Category 1 of the Physician's Recognition Award of the American Medical Association.

FAYETTEVILLE-VA MEDICAL CENTER

Medical Grand Rounds/General Medical Topics, Thursdays, 12:00 noon, Auditorium, Bldg. 3

FAYETTEVILLE-WASHINGTON REGIONAL MEDICAL CENTER

*Chest Conference, 1st Wednesday of every month, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Primary Care Conferences, every Monday, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Tumor Conference, every Thursday, 7:30 - 8:30 a.m., WRMC, Baker Conference Center, no fee, breakfast provided*

HARRISON-NORTH ARKANSAS MEDICAL CENTER

Cancer Conference, 4th Thursday, 12:00 noon, Conference Room

LITTLE ROCK-ST. VINCENT INFIRMARY MEDICAL CENTER

*Cancer Conferences, Thursdays, 12:00 noon, Southwestern Bell/Arkla room. Lunch provided.
General Surgery Grand Rounds, 1st Thursday, 7:00 a.m. Southwestern Bell/Arkla Room. Light breakfast provided.
Interdisciplinary AIDS Conference, 2nd Friday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Journal Club, Tuesdays, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Pulmonary Conference, 4th Wednesday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.*

LITTLE ROCK-BAPTIST MEDICAL CENTER

*Breast Conference, 3rd Thursday, 7:00 a.m., J.A. Gilbreath Conference Center
Gastroenterology/Surgery Journal Club, dates vary, AR Gastroenterology Memorial Medical Plaza, Suite 3A. Call 501- 202-2673 or 202-3888 for more information.
G.I. Problems Conference, 3rd Tuesday every other month beginning in April, 6:30 to 8:00 p.m., Shuffield Auditorium
Grand Rounds Conference, Wednesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Multidisciplinary Trauma Conference, 3rd Thursday each month, 5:00 to 6:00 p.m., location varies, call 501-202-2673 or 202-1406.
Pulmonary Conference, Tuesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Sleep Disorders Case Conference, Twice monthly, 12:00 noon. Call BMC ext. 2673 for dates and location. Lunch provided.*

MOUNTAIN HOME-BAXTER COUNTY REGIONAL HOSPITAL

*Lecture Series, 3rd Tuesday, 6:30 p.m., Education Building
Tumor Conference, Tuesdays, 12:00 noon, Carti Boardroom*

The University of Arkansas College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor the following continuing medical education activities for physicians. The Office of Continuing Medical Education designates that these activities meet the criteria for credit hours in category 1 toward the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

LITTLE ROCK-ARKANSAS CHILDREN'S HOSPITAL

*Faculty Resident Seminar, 3rd Thursday, 12:00 noon, Sturgis Auditorium
Genetics Conference, Wednesdays, 1:30 p.m., Conference Room, Springer Building
Infectious Disease Conference, 2nd Wednesday, 12:00 noon, 2nd Floor Classroom*

Pediatric Grand Rounds, Tuesdays, 8:00 a.m., Sturgis Bldg., Auditorium
Pediatric Neuroscience Conference, 1st Thursday, 8:00 a.m., 2nd Floor Classroom
Pediatric Pharmacology Conference, 5th Wednesday, 12:00 noon, 2nd Classroom
Pediatric Research Conference, 1st Thursday, 12:00 noon, 2nd Floor Classroom

LITTLE ROCK-UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

ACRC Multi-Disciplinary Cancer Conference (Tumor Board), Wednesdays, 12:00 noon, ACRC 2nd floor Conference Room.
Anesthesia Grand Rounds/M&M Conference, Tuesdays, 6:00 a.m., UAMS Education III Bldg., Room 0219.
Autopsy Pathology Conference, Wednesdays, 8:30 a.m., VAMC-LR Autopsy Room.
Cardiology-Cardiovascular & Thoracic Surgery Conference, Wednesdays, 11:45 a.m., UAMS, Shorey Bldg., room 3S/06
Cardiology Grand Rounds, 2nd & 4th Mondays, 4:00 p.m., UAMS Shorey Bldg., 3S/06
Cardiology Morning Report, every morning, 7:30 a.m., UAMS, Shorey Bldg. room 3S/07
Cardiothoracic Surgery M&M Conference, 2nd Saturday each month, 8:00 a.m., UAMS, Shorey Bldg. room 2S/08
CARTI/Searcy Tumor Board Conference, 2nd Wednesday, 12:30 p.m., CARTI Searcy, 405 Rodgers Drive, Searcy.
Centers for Mental Healthcare Research Conference, 1st & 3rd Wednesday each month, 4:00 p.m., UAMS, Child Study Ctr.
CORE Research Conference, 2nd & 4th Wednesday each month, 4:00 p.m., UAMS, Child Study Ctr., 1st floor auditorium
Endocrinology Grand Rounds, Fridays, 12:00 noon, ACRC Bldg., Sam Walton Auditorium, 10th floor
Gastroenterology Grand Rounds, Thursdays, 4:00 p.m., UAMS Hospital, room 3D29 (1st Thurs. at ACH)
Gastroenterology Pathology Conference, 4:00 p.m., 1st Tuesday each month, UAMS Hospital
GI/Radiology Conference, Tuesdays, 8:00 a.m., UAMS Hospital, room 3D29
In-Vitro Fertilization Case Conference, 2nd & 4th Wednesdays each month, 11:00 a.m., Freeway Medical Tower, Suite 502 Conf. rm
Medical/Surgical Chest Conference, each Monday, 4:00 p.m., UAMS Hospital, room M1/293
Medicine Grand Rounds, Thursdays, 12:00 noon, UAMS Education II Bldg., room 0131
Medicine Research Conference, one Wednesday each month, 4:30 p.m. UAMS Education II Bldg. room 0131A
Neuropathology Conference, 2nd Wednesday each month, 4:00 p.m., AR State Crime Lab, Medical Examiner's Office
Neurosurgery, Neuroradiology & Neuropathology Case Presentations, Thursdays, 4:00 p.m., UAMS Hospital OB/GYN Fetal Boards, 2nd Fridays, 8:00 a.m., ACH Sturgis Bldg.
OB/GYN Grand Rounds, Wednesdays, 7:45 a.m., UAMS Education II Bldg., room 0141A
Ophthalmology Problem Case Conference, Thursdays, 4:00 p.m., UAMS Jones Eye Institute, 2 credit hours
Orthopaedic Basic Science Conference, Tuesdays, 7:30 a.m., UAMS Education II Bldg., room B/107
Orthopaedic Bibliography Conference, Tuesdays, Jan. - Oct., 7:30 a.m., UAMS Education II Bldg.
Orthopaedic Fracture Conference, Tuesdays, 9:00 a.m., UAMS Education II Bldg., room B/107
Orthopaedic Grand Rounds, Tuesdays, 10:00 a.m., UAMS Education II Bldg., room B/107
Otolaryngology Grand Rounds, 2nd Saturday each month, 9:00 a.m., UAMS Biomedical Research Bldg., room 205
Otolaryngology M&M Conference, each Monday, 5:30 p.m., UAMS Otolaryngology Conf. room
Perinatal Care Grand Rounds, every Tuesday, 12:15 p.m., BMC, 2nd floor Conf. room
Psychiatry Grand Rounds, Fridays, 11:00 a.m., UAMS Child Study Center Auditorium
Surgery Grand Rounds, Tuesdays, 8:00 a.m., ACRC Betsy Blass Conf.
Surgery Morbidity & Mortality Conference, Tuesdays, 7:00 a.m., ACRC Betsy Blass conference room, 2nd floor
NLRVA Geriatric/Medicine Grand Rounds, Thursdays, 8:00 a.m., VAMC-NLR, Bldg 68, room 130
VA Medical Service Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D109
VA Pathology-Hematology/Oncology-Radiology Patient Problem Conference, Thursdays, 8:15 a.m., VAMC-LR, room 2E142
VA Psychiatry Difficult Case Conference, 4th Monday, 12:00 noon, VAMC-NLR, Mental Health Clinic
VA Lung Cancer Conference, Thursdays, 3:00 p.m., VAMC-LR, room 2E142
VA Medical Service Teaching Conference, Thursdays, 8:00 a.m., VAMC-NLR, Bldg. 68 room 130
VA Medicine-Pathology Conference, Tuesday, 2:00 p.m., VAMC-LR, room 2D109
VA Medicine Resident's Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D08
VA Physical Medicine & Rehab Grand Rounds, 4th Friday, 11:30 a.m., VAMC-NLR Bldg. 68, room 118 or Baptist Rehab Institute
VA Surgery Grand Rounds, Thursdays, 12:45 p.m., VAMC-LR, room 2D109, 1.25 credit hours
VA Topics in Rehabilitation Medicine Conference, 2nd, 3rd, & 4th Thursdays, 8:00 a.m., VAMC-NLR Bldg. 68, room 118
VA Weekly Cancer Conference, Monday, 3:00 p.m., VAMC-LR, room 2E-142
White County Memorial Hospital Medical Staff Program, once monthly, dates & times vary, White County Memorial Hospital, Searcy

EL DORADO-AHEC

Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., Warner Brown Campus, 6th floor Conf. Rm.
Behavioral Sciences Conference, 1st & 4th Friday, 12:15 p.m., AHEC - South Arkansas
Chest Conference, 3rd Wednesday, 12:15 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.
Dermatology Conference, 1st Tuesdays and 1st Thursdays, AHEC - South Arkansas
GYN Conference, 2nd Friday, 12:15 p.m., AHEC-South Arkansas
Internal Medicine Conference, 1st, 2nd & 4th Wednesday, 12:15 p.m., AHEC-South Arkansas
Noon Lecture Series, 2nd & 4th Thursday, 12:00 noon, Union Medical Campus, Conf. Rm. #3. Lunch provided.
Pathology Conference, 2nd Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5. Lunch provided.
Pediatric Conference, 3rd Friday, 12:15 p.m., AHEC - South Arkansas
Pediatric Case Presentation, 3rd Tuesday, 3rd Friday, AHEC - South Arkansas

Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., AHEC - South Arkansas (Interactive video)
Pathology Conference, 2nd Tuesday, 12:15 p.m., AHEC - South Arkansas
Obstetrics-Gynecology Conference, 4th Thursday, 12:15 p.m., AHEC - South Arkansas
Surgical Conference, 1st, 2nd & 3rd Monday, 12:15 p.m., AHEC - South Arkansas
Tumor Clinic, 4th Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5, Lunch provided.
VA Hematology/Oncology Conference, Thursdays, 8:15 a.m., VAMC-LR Pathology conference room 2E142

FAYETTEVILLE-AHEC NORTHWEST

AHEC Teaching Conferences, Tuesdays & Wednesdays, 12:00 noon, AHEC Classroom
AHEC Teaching Conferences, Fridays, 12:00 noon, AHEC Classroom
AHEC Teaching Conferences, Thursdays, 7:30 a.m., AHEC Classroom
Medical/Surgical Conference Series, 4th Tuesday, 12:30, Bates Medical Center, Bentonville

FORT SMITH-AHEC

Grand Rounds, 12:00 noon, first Wednesday of each month, Sparks Regional Medical Center
Neuroradiology Conference, 1st Tuesday of each month, 12:00 noon, Sparks Regional Medical Center, 7th floor dining room
Neuroscience & Spine Conference, 3rd Wednesday each month, 12:00 noon, St. Edward Mercy Medical Center
Tumor Conference, Mondays, 12:00 noon, St. Edward Mercy Medical Center
Tumor Conference, Wednesdays, 12:00 noon, Sparks Regional Medical Center

JONESBORO-AHEC NORTHEAST

AHEC Lecture Series, 1st & 3rd Tuesday, 12:00 noon, Stroud Hall, St. Bernard's Regional Medical Center. Lunch provided.
Arkansas Methodist Hospital CME Conference, 7:30 a.m., Hospital Cafeteria, Arkansas Methodist Hospital, Paragould
Chest Conference, 2nd Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Citywide Cardiology Conference, 3rd Thursday, 7:30 p.m., Jonesboro Holiday Inn
Clinical Faculty Conference, 5th Tuesday, St. Bernard's Regional Medical Center, Dietary Conference Room, lunch provided
Craighead/Poinsett Medical Society, 1st Tuesday, 7:00 p.m. Jonesboro Country Club
Greenleaf Hospital CME Conference, monthly, 12:00 noon, Greenleaf Hospital Conference Room. Lunch provided.
Independence County Medical Society, 2nd Tuesday, 6:30 p.m., Batesville Country Club, Batesville
Interesting Case Conference, 4th Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Jackson County Medical Society, 3rd Thursday, 7:00 p.m., Newport Country Club, Newport
Kennett CME Conference, 3rd Monday, 12:00 noon, Twin Rivers Hospital Cafeteria, Kennett, MO
Methodist Hospital of Jonesboro Cardiology Conference, every other month, 7:00 p.m., alternating between Methodist Hospital Conference Room and St. Bernard's, Stroud Hall. Meal provided.
Methodist Hospital of Jonesboro CME Conference, 2nd Tuesday, 7:00 p.m., Cafeteria, Methodist Hospital of Jonesboro
Neuroscience Conference, 3rd Monday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch Provided.
Orthopedic Case Conferences, every other month beginning in January, 7:30 a.m., Northeast Arkansas Rehabilitation Hospital
Perinatal Conference, 2nd Wednesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Piggott CME Conference, 3rd Thursday, 6:00 p.m., Piggott Hospital. Meal provided.
Pocahontas CME Conference, 3rd Wednesday, 12:00 noon & 7:30 p.m., Randolph County Medical Center Boardroom
Tumor Conference, Thursdays, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Walnut Ridge CME Conference, 3rd & last Tuesday, 12:00 noon, Lawrence Memorial Hospital Cafeteria
White River CME Conference, 3rd Thursday, 12:00 noon, White River Medical Center Hospital Boardroom

PINE BLUFF-AHEC

Behavioral Science Conference, 1st & 3rd Thursday, 12:00 noon, Jefferson Regional Medical Center
Chest Conference, 2nd & 4th Friday, 12:00 noon, Jefferson Regional Medical Center
FP Journal Club, 2nd Monday, 12:00 noon, Jefferson Regional Medical Center
Internal Medicine Conference, 2nd & 4th Thursdays, 12:00 noon, Jefferson Regional Medical Center
Obstetrics/Gynecology Conference, 2nd Tuesday, 12:00 noon, Jefferson Regional Medical Center
Orthopedic Case Conference, 2nd & 4th Wednesdays, 12:00 noon, Jefferson Regional Medical Center.
Pediatric Conference, 3rd Wednesday, 12:00 noon, Jefferson Regional Medical Center
Radiology Conference, 3rd Tuesday, 12:00 noon, Jefferson Regional Medical Center
Southeast Arkansas Medical Lecture Series, 4th Tuesday, 6:30 p.m., Locations vary. Dinner meeting.
Tumor Conference, 1st Wednesday & 3rd Friday, 12:00 noon, Jefferson Regional Medical Center

TEXARKANA-AHEC SOUTHWEST

Chest Conference, every other 3rd Tuesday/quarterly, 12:00 noon, St. Michael Health Care Center
Neuro-Radiology Conference, 1st Thursday every month at St. Michael Health Care Center and 3rd Thursday of every month at Wadley Regional Medical Center, 12:00 noon.
Residency Noon Conference, Monday, Wednesday, Thursday, Friday each week, alternates between St. Michael Health Care Center & Wadley Regional Medical Center
Tumor Board, Fridays, except 5th Friday, 12:00 noon, Wadley Regional Medical Center & St. Michael Hospital
Tumor Conference, every 5th Friday, 12:00 noon alternates between Wadley Regional Medical Center & St. Michael Hospital

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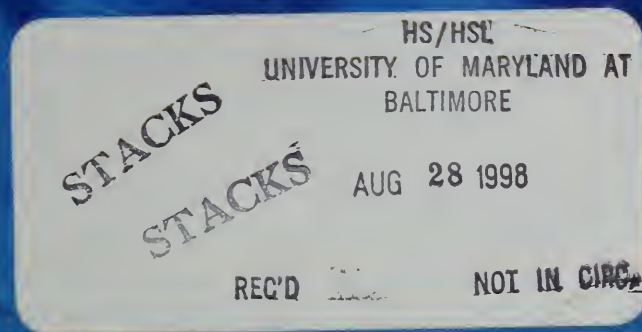
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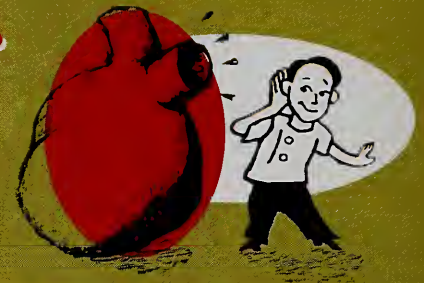
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*Award-Winning Journal of the Arkansas Medical Society
Recipient of the ASAE Excellence in Communications Award*

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Cover artwork titled "Prairie Evening" is an oil painting by Roger Carlisle of State University, Arkansas. Artwork was made available by the Arkansas Artists Registry, a part of the Arkansas Arts Council, an agency of the Department of Arkansas Heritage.

Random Musing about a Little Blue Pill

Alex Finkbeiner, M.D.*

As a urologist in the midst of the Viagra revolution, an editorial regarding the *little blue pill* is impossible to resist.

Since its introduction a few months ago, Viagra has dominated the media ranging from the cover and lead article in *Time* magazine to the obligatory coverage in the monologues of late night show hosts. I'm sure it provided some relief to President Clinton as Viagra displaced the political peccadilloes of the President as the primary topic of talk shows and one-liners. Inevitably, of course, the *little blue pill* only became added fodder for the political jokes, ie. take a pill and be like Bill.

Being unable to find a unified theme about Viagra with profound philosophic, psychologic or sociologic implications, I'll simply share some random thoughts about this *little blue pill*.

Eureka! The Archimedes Principle Strikes Again! Sildenafil, now known as Viagra, was initially evaluated as an antihypertensive drug in Europe. Its properties to promote erections were uncovered only after the male patients on the antihypertensive study refused to return the unused pills because they had serendipitously noted that erections were more easily attained after taking this new blood pressure pill. Alas, it didn't lower the blood pressure but it raised their sexual performance.

Ponce de Leon: With over a million men of varying ages now taking the pill, are we finally discovering the Fountain of Youth allegedly sought by Ponce de Leon 400 years ago?

Man, I Should'a Bought WalMart: Pfizer, the manufacturer of Viagra, has experienced a doubling of their stock price in one year mainly in anticipation of the

sales of Viagra. Interestingly, after Viagra was released with sales projected to \$1-2 billion per year the stock has fallen and remains about 10 points below the high a few days after release. Does speculation or reality drive the stock market?

Liars, Damn Liars, Statistics: Now I'm a firm believer in statistics and probabilities, and I believe I understand them quite well. Ya gotta wonder sometimes where demographic data comes from, however. Our medical literature and the popular press state 20 to 30 million men are impotent in the U.S. today and are potential consumers of Viagra. Who knows where those numbers arose and how accurate they are? Even the 10 million difference between the 20-30 million guess is a big number, but suddenly, such numbers are chiseled in stone and oft quoted. It reminds me of the Census Bureau coming to Congress requesting more money to finish their count during the 1990 census. They stated they were 80% completed but ran out of money and needed several millions of dollars to complete the census. Hell, I'm no rocket scientist but if they were so sure they knew 80% of the census why didn't they just add 20% to reach 100% and save all those millions of dollars?

Turf Wars: Predictably, the urologists are protesting Pfizer detailing Viagra to family physicians and internists; after all, non-urologists have no idea of how to diagnose and treat impotency. I just returned from the American Urologic Association annual meeting. While there, I listened to a panel of the world's impotency gurus discussing the appropriate medical diagnostic work-up for impotency in light of the *little blue oral pill* being available. The world famous urology impotency doctors could not reach a consensus.

Third Party Carriers: Despite paying lip service to patient care, profits are the mantra of third party carriers. First comes the issue of "medical necessity" of

* Dr. Finkbeiner, a member of the editorial board for *The Journal of the Arkansas Medical Society*, is Professor of Urology in the Department of Urology at UAMS.

an erection pill. We physicians are being asked to document proof of organic impotency. Such proof generally requires additional testing that I normally do not perform; tests that increase costs they are trying to save. Further, absolute proof of impotency is hard to come by (sorry)! We are essentially asked to prove a negative. Next, comes the issue of how frequent is an erection medically necessary? In my experience of writing prescriptions for patients of the third party carriers, erections are medically necessary from 4 to 30 times per month! Finally, most third party carriers have deemed erections as coverable but not treatment for infertility, baldness, cosmetic surgery or birth control pills. Seems to me cost-consciousness would couple birth control coverage for women with drugs that increase the risk of conception (Viagra).

True, True and Unrelated: At the time of this writing, the lay press is reporting six deaths in men taking Viagra. Reading the articles gives no indication that Viagra was the cause of the demise of these men. If a million older men were picked randomly in the U.S., I would expect a few hundred would die of varying causes over a month's time. If only six of the million men taking Viagra died during the first month of use, it would seem to me that statistically Viagra is saving lives as well as psyches.

The Greatest Enemy of Good is Perfect: No, Viagra does not make normal (good) erections better; it is only effective in impotent men.

A an's Brain is in His Penis: The one contraindication for taking Viagra is the concomitant taking of a nitrate for coronary artery disease; both Viagra and nitrates have hypotensive properties which may be dangerous as additive. Many patients have declared they will discontinue their nitrates in order to take Viagra. When asked what they will do when they develop chest pain during intercourse, they just grin.

Price Wars: Already we see advertisements for Viagra at \$7.00 a tablet (most charge \$10-12 per tablet).

One Stop Shopping: Viagra has not been approved in Canada. My Canadian colleagues tell me long lines are forming at Canada-U.S. border crossings as Canadians are flocking to medical clinics and pharmacies on the U.S. side of the border as enterprising American physicians along the border are advertising a history, physical and Viagra prescription for \$50.00.

Second Favorite Personal Viagra Story: It was on a Friday afternoon; finishing a long clinic day at the end of a long tiring week. Ready to go home, I took a deep breath and girded my loins for the final patient. He proved to be a delightful 86 year old man who simply wanted a refill of 30 Viagra tablets. He made my week-end. Looking forward to the "golden years."

Favorite Personal Viagra Story: My favorite Viagra story involves a phone call at home from a friend I'd

not talked to for many months. A long catching-up conversation ensued. Finally came, "Oh, by the way! Can you call me in a prescription for Viagra?" After my song and dance about needing to be evaluated, making sure he was not on nitrates and an offer of a few samples to try to see if they are effective, he informed me he'd already tried Viagra and it was effective. I called in a prescription. Subsequently, a mutual friend gave me the rest of the story. It seems that my friend's wife had confiscated the original bottle of Viagra and was doling a pill out when she was in the mood. He simply wanted a supply that he could control. ■

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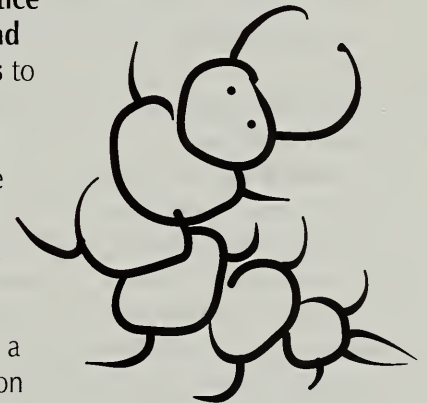
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Medicine in the News

Health Care Access Foundation

As of July 1, 1998, the Arkansas Health Care Access Foundation has provided free medical service to 14,169 medically indigent persons, received 26,971 applications and enrolled 52,871 persons. This program has 1,900 volunteer health care professionals including medical doctors, dentists, hospitals, home health agencies and pharmacists. These providers have rendered free treatment in 69 of the 75 counties.

AFMC Project Saves Arkansas Medicaid Dollars & Improves Quality of Care for Women

By encouraging hospitals and physicians to perform fewer repeat Cesarean deliveries (C-section), Arkansas Foundation for Medical Care (AFMC) saved Arkansas Medicaid nearly one quarter million dollars in 1997.

Through a collaborative project initiated by AFMC, hospitals throughout Arkansas have successfully reduced the rate of C-sections performed for Medicaid recipients by 11 percent statewide. At the core of this project was the increased use of vaginal birth after C-section (VBAC).

Contrary to traditional views advocating "once a C-section, always a C-section," studies indicate that 60-80 percent of pregnant women who attempt to deliver vaginally after one or more previous C-section succeed.

AFMC's efforts to promote the increased use of VBAC were highly successful. Hospitals participating in the project showed a 51 percent increase in VBAC, while hospitals who chose not to participate showed a two percent decrease.

With estimated costs of C-sections typically around \$2,000 higher than vaginal deliveries, cost savings to Arkansas Medicaid could top \$250,000 per year as more hospitals take part in AFMC's C-section project.

"Hospitals participating in AFMC's study are on the cutting edge of quality consciousness," said Roy Jeffus, Assistant Director for the Arkansas Division of Medical Services (Medicaid). "When a medical procedure can reduce risk to a mother and child and lead to fewer complications and shorter hospital stays, it not only cuts costs, but improves the overall quality of the care received," said Jeffus. "This type of quality improvement project not only encourages medical cost reduction, but provides Medicaid recipients and their physicians additional, and potentially safer, childbirth options."

According to the U.S. Department of Health and Human Services, C-section deliveries carry a higher maternal mortality rate, two to 26 times that of vaginal

delivery. Yet, C-section rates have increased nationally since 1965 with no evidence of improvement in the health of mothers or children. The U.S. Public Health Service has recommended a maximum C-section rate of 15 percent nationwide as part of its "Healthy People 2000" initiative, a national strategy to improve the overall health of Americans, primarily through preventive care.

At the start of AFMC's project in 1995, Arkansas' C-section rates were higher than national figures with around 23 percent of Medicaid deliveries being C-section. With approximately 40 percent of all births in Arkansas being to mothers with Medicaid, the success of this project makes a notable statewide impact. However, its success also points to further quality improvements and cost savings for public and private arenas of health care and cost management outside Medicaid.

"These results impact more than just the Medicaid bottom line," said AFMC principal clinical coordinator William Golden, M.D. "The increased use of non-invasive procedures like VBAC enhance the quality of health care for all Arkansans. Positive results like we've seen here encourage hospitals and health care providers to monitor their own performance for improvement opportunities and to participate in future AFMC quality improvement projects."

AFMC is the non-profit peer review and quality improvement organization (QIO) for both Medicaid and Medicare in the state. AFMC has offices in Fort Smith and Little Rock, as well as field staff across the state.

Community-based and clinically oriented, AFMC works collaboratively with health care plans, providers, facilities and physicians to identify opportunities for improvement and encourage innovation in health care. AFMC strives to ensure health care quality in a meaningful and effective way by initiating quality improvement projects and disseminating information about health care guidelines.

Information provided by an AFMC news release dated July 2, 1998.

AFMC Solves the Medicare Puzzle

Better Medicare coverage for osteoporosis and diabetes is big news. But, Medicare's best intentions are often stifled when consumers try to make sense of its confusing rules and regulations. Arkansas Foundation for Medical Care (AFMC) is simplifying the information exchange through its beneficiary relations program.

With educational fairs called "Mapping Your Way Through the Medicare Maze," a beneficiary hotline (800-272-5528), and numerous outreach publications and services, AFMC helps Medicare recipients understand rights, benefits, and the importance of new Medicare coverages.

"AFMC's goal is to teach senior citizens to use Medicare effectively," said Sally Johnson, director of beneficiary relations at AFMC. "By paying for preventive measures, Medicare allows seniors to better control their own health."

AFMC has worked to educate Arkansas Medicare recipients about the latest changes, as well as others enacted earlier this year. AFMC works with government agencies and senior citizen groups to promote health care improvement and education for Medicare patients.

"AFMC encourages seniors to have screenings and participate in educational programs in time to prevent or treat disease," said Johnson. "Many Medicare recipients hear about screenings and immunizations but don't rush to get them because they fear the expense. AFMC helps them understand that Medicare's expanded coverage means they now can afford to take care of themselves."

Medicare's New Benefits Effective July 1, 1998

Osteoporosis - Coverage for bone density tests to identify bone mass, detect bone loss, or determine bone quality, has been added as a Medicare benefit. Osteoporosis causes 1.5 million fractures annually at a total medical cost of \$13.8 billion. Bone density tests accurately determine the status of a person's bone health and predict the risk of future fractures.

Diabetes - Medicare benefits have been expanded for more than 3 million senior citizens. Diabetes self-management training, a key to the prevention of further disease and debilitation for diabetic patients, is now covered. Expanded coverage of blood glucose monitors and blood-testing strips, regardless of the patient's diabetes type or insulin dependency, is also a welcome change.

Other Medicare Changes - In addition to improved osteoporosis and diabetes coverage, Medicare also recently increased benefits for mammography, pap smear and pelvic exams, colorectal cancer screening and flu and pneumonia immunizations.

AFMC's beneficiary hotline is open from 8:30 a.m. to 5:00 p.m. Monday through Friday. Experts are available to assist with quality of care concerns, Medicare HMO issues and other Medicare questions. AFMC Beneficiary Hotline: 800-272-5528 or 501-649-8501.

Information provided by an AFMC news release dated July 7, 1998.

Malpractice Claims Result More From Neurologically Impaired Newborn Cases Than Any Other Reason

Difficulties in the management of pregnancy and delivery that result in a newborn with neurologic impairment are the leading cause of malpractice claims in terms of frequency and cost, according to a new

report by the Physician Insurers Association of America (PIAA).

The report, *Neurologic Impairment in Newborns: A Malpractice Claim Study*, found that the average indemnity payment to the plaintiff in such cases was \$1.13 million. More than 47 percent of all claims involving a neurologically impaired newborn result in an indemnity payment to the claimant, as compared to 31 percent for claims arising for all types of conditions.

"What causes accidents that lead to neurologic deficits in newborns remains somewhat elusive," according to the report. "Factors thought to be risk factors indicated by the relevant medical literature are not necessarily the issues that result in allegations of negligence."

Some findings include:

- * Maternal obesity was associated with an increased risk of adverse outcomes of pregnancy. Upon testing each maternal risk factor thought to be an issue, it was found that obese women are at a much greater risk of maternal complications, such as hypertension and diabetes, which could increase the risk of bearing an infant with neurologic impairment.

- * Many cases involved the allegation that the consultation with the obstetrician was delayed. These cases included those in which a nurse midwife failed to make a timely referral after signs of distress were noted, and a nurse who failed to contact the physician after distress was or should have been observed.

Information provided by a Physician Insurers Association of America news release dated June 24, 1998.

New Model Projects 11 Percent Fewer Deaths in 20 Years if U.S. Smokers Stopped Smoking

If all adult Americans who smoked in the mid-1970s had quit, there would now be about 11 percent fewer overall deaths in the United States, concludes a study supported by the Agency for Health Care Policy and Research (HS07002). Men would account for 58 percent of deaths avoided by year 20, women for 41 percent. Men have historically smoked more than women, so that their exposure before they stop smoking is greater and has a greater impact on their health, explains Louise B. Russell, Ph.D., of Rutgers University's Institute for Health.

Dr. Russell and her colleagues developed a simulation model based on data from a longitudinal survey of a representative sample of over 11,000 U.S. adults 25 and older, which included risk factors for all-cause mortality, hospital admissions, and nursing home admissions that occurred after baseline (1971 to 1975) through 1987. They estimated the probability of survival for each adult in the sample each year after baseline as a function of baseline risk factors. Risk factors included, among others, diabetes, smoking, high blood pressure, and elevated serum cholesterol. The

To test the model's validity, the researchers compared actual deaths with projected deaths for the first 12 years of follow-up, the longest period of follow-up available for all participants since some did not enter the sample until 1975. The researchers found that projected deaths closely matched observed deaths by age and sex. They kept baseline risk factors at their observed values, but changed smokers to former smokers to compute annual projections for 5 and 20 years after baseline. Five years after baseline, cumulative deaths were 15 percent lower than projected if no one smoked, with a decline of 11 percent in total deaths by the 20th year.

Details are in "Modeling all-cause mortality: Projections of the impact of smoking cessation based on the NHEFS," by Dr. Russell, Jeffrey L. Carson, M.D., William C. Taylor, M.D., and others, in the April 1998 *American Journal of Public Health* 88, pp. 630-636.

Information provided by the Agency for Health Care Policy and Research "Research Activities" newsletter Number 216, June 1998.

HIV Infections Increasing Among Women and Minorities

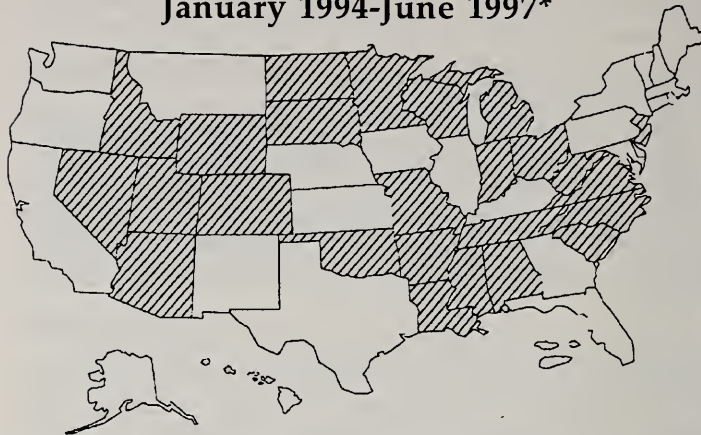
In contrast with the trend of declining AIDS diagnoses in the United States over the past few years, diagnoses of HIV infection have remained relatively stable, according to HIV surveillance data released by CDC in April. However, the data indicate an increase in HIV infections among women and minorities, particularly Hispanics.

The report, published in the April 24 issue of the CDC's *Morbidity and Mortality Weekly Report*, is the first direct assessment of HIV infection trends (rather than AIDS trends) in the United States and is based on data from the 25 states (see map) with integrated HIV and AIDS reporting systems.

With advances in treatment for HIV infection and AIDS, the total number of people living with HIV and AIDS is increasing. Until recently, AIDS cases have provided a reliable picture of trends in the HIV epidemic because researchers could take into account the time between HIV infection and progression to AIDS and estimate, from observed cases of disease, where and how many new infections were occurring. But with new treatment advances that slow the progression to AIDS among some HIV-infected people, AIDS cases no longer provide a reliable basis for estimating HIV trends.

The CDC report examines data collected from January 1994 through June 1997 in the 25 states that had both HIV infection and AIDS case reporting. These data indicate that, for these states, more than 140,000 people are living with HIV infection and AIDS and approximately 20,000 new HIV infections are diagnosed annually. Cumulatively, for this 42-month period:

States conducting HIV infection reporting, January 1994-June 1997*



**Connecticut, Texas, and Oregon have confidential, name-based HIV infection reporting for pediatric cases only. Florida, New Mexico, and Nebraska have initiated name-based HIV reporting recently, but did not conduct HIV surveillance during this time frame.*

*Men who have sex with men (MSM) have the highest numbers of diagnosed cases of AIDS (8,866, or 44% of the total) and of HIV infection (17,098, or 32%).

*Injection drug users (IDUs) make up the second largest risk category, making up 20% (3,959) of AIDS diagnoses and 18% (9,671) of HIV infection diagnoses.

*The percentage of people infected heterosexually may be increasing. Although heterosexual transmission is the reported risk for 12% (2,428) of those diagnosed with AIDS, it is the reported risk for 18% (9,279) of those diagnosed with HIV infection.

In 1996, the most recent full year for which overall trends can be examined, CDC found that:

*HIV infection diagnoses declined slightly among men (-3%, from 10,762 to 10,395), but increased among women (+3%, from 4,126 to 4,253).

*HIV infection diagnoses declined slightly among African Americans (-3%, from 8,569 to 8,300) and among whites (-2%, from 5,093 to 4,966), but increased among Hispanics (+10%, from 971 to 1,070). However, the number of cases among Hispanics was relatively small.

Taking a closer look at the impact of HIV among young people (13-24 years old) in these 25 states, we find that the majority of infections were diagnosed among African Americans and women. Of the 7,200 cases of HIV reported in this age group from January 1994 to June 1997:

*44% (3,203) were among females.

*63% (4,566) were among African Americans, and 5% (394) were among Hispanics.

*At least 26% (1,886) were heterosexually acquired infections, 31% (2,270) were among MSM, and 6% (449) were among IDUs.

*HIV diagnoses in this age group remained relatively stable during the 4-year period, changing only slightly from 1995 to 1996 (from 2,066 to 1,991). These data suggest that the number of young people infected each year (at least 2,000) has remained fairly constant in

Comparison of HIV and AIDS Diagnoses from States with HIV and AIDS Reporting, January 1994 - June 1997

	Disease Status at Diagnosis	
	HIV (% total cases)	AIDS (% total cases)
Women	28%	17%
African Americans	57%	45%
People Reporting Heterosexual Transmission	18%*	12%
Men Who Have Sex With Men	32%	44%
Young People (ages 13-24)	14%	3%

**Because many of the cases of HIV infection initially reported without risk information are later determined to be related to heterosexual contact, those numbers likely underestimate the true number of individuals diagnosed with heterosexually acquired infection.*

these states since 1994.

The number of new HIV infection diagnoses among 13- to 24-year-olds is thought to most closely indicate HIV incidence trends because young people have more recently initiated high-risk behaviors.

While these data provide a reliable indication of

the number and characteristics of individuals diagnosed with HIV in confidential settings, they do not include people tested only at anonymous test sites or not yet tested. CDC estimates that two-thirds of people living with HIV infection have been confidentially tested for HIV and know their status. However, at present, many of the states with the highest AIDS prevalence rates do not conduct HIV reporting, and racial and ethnic minorities may not be as fully represented in the states conducting HIV reporting as they are in states that do not. As additional states implement HIV reporting, these data will become more representative of national trends in the epidemic.

Analyzing data from integrated HIV and AIDS reporting systems provides an indicator of the completeness of reporting of HIV surveillance data by examining the number of HIV diagnoses that were not reported until after AIDS was reported. The analysis found that HIV reporting in these 25 states was nearly 90% complete (only 12% of HIV diagnoses were not first reported through the HIV reporting system) and that less than 2% of reports were duplicates.

Information provided by the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention "HIV/AIDS Prevention" newsletter dated June 1998.

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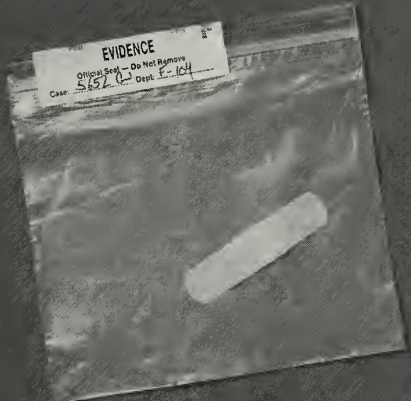


Exhibit A:

Adhesive bandage, which plaintiff alleges defendant pulled rapidly from skin, violently tearing three hairs from plaintiff's arm, which resulted in severe shock, trauma, disfigurement, chronic debilitating pain and permanent psychological damage.

AMS Newsmakers

Dr. Fred Henker, a retired Little Rock physician, was recently awarded the Nancy C.A. Roeske, M.D., Certificate of Excellence in recognition of outstanding and sustained contribution to medical education. The award was presented to Dr. Henker at the 151st annual meeting of the American Psychiatric Assoc. in Toronto.



Fred Henker, M.D.

Dr. Karl David Straub, a Little Rock Endocrinologist, was recently appointed to the Little Rock Water Commission Board.

The AMA Physician's Recognition Award is awarded each month to physicians who have completed acceptable programs of continuing education.

The AMS recipients for the month of May are: Frederick Norris Burt, Crossett; Scott Bennett Harter, Little Rock; Steven Eugene Kempson, Texarkana; Tom Lee Meziere, Little Rock; David Armstrong Miles, Little Rock; Joseph Stanley Murphy, Little Rock; Eugene A. Shaneyfelt, Manila; Peter Grant Singer, North Little Rock; Bernard Douglas Stokes, Little Rock; Robert Allen Watson, El Dorado; and Pamela Janelle Wills, Little Rock.

The AMS recipients for the month of June are: Carmen Lynn Arick, Little Rock; Rebecca Lynn Barrett, Fayetteville; Michael Steven Bouton, Fort Smith; James Ralph Braun, Hot Springs; Homer Edward Brooks, Fort Smith; Angelo George Coppola, Little Rock; Robert Thomas Emery, Batesville; John Scott Erwin, Texarkana; Mustafa Farooque, Little Rock; Susan Portis Ferguson, Fayetteville; Michael C. Fischer, North Little Rock; Sanyasi Rao Ganta, Lake Village; Lawson Edward Glover, Little Rock; Allan K. Kirkland, Fayetteville; Ramakrishna Raju Kosuri, Little Rock; Raymond C. Lewandowski, Fort Smith; Ralph Edwin Ligon, Pine Bluff; Eugene Lu, Little Rock; W. Jean Matchett, Little Rock; Raman Mocharla, Little Rock; Myra Clavier Mosley, Fort Smith; Rebecca Plumlee Phillips, Pine Bluff; Benjamin Lee Rodgers, Little Rock; George T. Schroeder, Little Rock; Sayyadul M. Siddiqui, Little Rock; Laura Katherine Simpson, Little Rock; Paul Wade Stout, Little Rock; Kenneth Blair Turner, Russellville; Kenneth Linn Ubben, Fayetteville; James Robert Wharton, Little Rock; and Eric Anthony Woodard, Sherwood.

Send your accomplishments and photo for consideration in *AMS Newsmakers* to: AMS Journal Editor, PO Box 55088, Little Rock, AR 72215-5088

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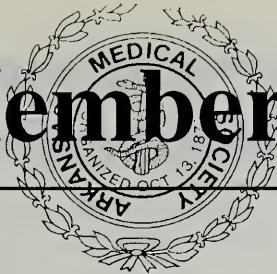
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New Member Profile



Denise Rochelle Greenwood, M.D.

PROFESSIONAL INFORMATION

Specialty: Surgical Oncology of the Breast

Years in Practice: One and a half

Office: Little Rock

Medical School: University of Texas Medical Branch at Galveston, 1987

Residencies: State University, Kings County Hospital Center, Brooklyn, NY, 1988; New Hanover Memorial, Wilmington, NC, 1990; and Marshall University School of Medicine, Huntington, WV, 1992.

Other Business Affiliates/Organizations: American College of Surgeons; Texas Medical Society; and Mount Holyoke College Alumnae Association Club President

Volunteer Work: Komen Foundation and Medical Director and Founder of Link Breast Clinic

Honors/Awards: Mount Holyoke College Student Leadership Award

PERSONAL INFORMATION

Children: Ford Cameron Richmond, 2 years old, and Tucker Heydon Richmond, 5 months old

Date/Place of Birth: June 24, 1961, in Corpus Christi, Texas

Hobbies: Gardening, home restoration, watersports, tennis and needlework

THOUGHTS & OTHER INFORMATION

If I had a different job, I'd be: In politics

Historical figure I most identify with: Jacqueline Kennedy Onassis

Best & Worst Habit: Tenacity

Favorite junk food: Thumbprint cookies

Behind my back, they say: I'm nonstop!

Most valued possessions: Photo albums and camera

People who knew me in medical school, thought I was: The social chairman

The turning point of my life was when: My children were born

Nobody knows I: Am writing a children's book

Favorite vacation spot: England and Germany

One goal I haven't achieved, yet: Running for public office

One goal I am proud to have reached: Becoming a mother and a surgeon, and performing the roles of each full time

When I was a child, I wanted to be: A nun, in the 3rd grade, and a doctor from the 4th grade on

One of my pet peeves: People who say, "It can't be done"

First Job: Lifeguard and swim instructor

Worst Job: Receptionist

The last book I read: "Women Who Run with the Wolves" by Clarissa P. Estes

One word to sum me up: Enthusiastic

My philosophy on life is: Anything is possible, anything is attainable if you have the determination to make it happen and the faith to believe that it will happen.

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The Role of the Primary Care Physician in Maximizing Cognitive and Behavioral Recovery from Moderate to Severe Pediatric Traumatic Brain Injury

Carolyn M. Patterson, Ph.D.*

Abstract

Traumatic brain injury (TBI) is a major cause of death and the most common cause of acquired disability in children. Moderate to severe TBI typically results in cognitive deficits, and behavioral and psychosocial adjustment problems, sometimes compromising long term development. Although variable, considerable recovery can occur, especially over the first one to two years post-injury. Appropriate educational and psychological intervention is critical to positive outcome. The primary care physician (PCP) has a major role in monitoring progress and intervention, and therefore in maximizing outcome. The short term neurocognitive and neurobehavioral sequelae and recovery pattern for traumatic brain injury, and the role of the primary care physician in maximizing recovery based on risk factors are described. Some intervention resources are included.

Introduction

Traumatic brain injury (TBI) is a significant pediatric health problem. It is a primary cause of death and the most common cause of acquired disability in children.¹ Outcome is strongly correlated with severity of injury, more so for cognition than for behavioral adjustment. The Glasgow Coma Scale is often used during the acute medical phase, in estimating severity of injury. This score is based on motor, verbal, and eye opening responses. Scores range from 3 to 15. Scores of 13 to 15 reflect minor or mild injury, 9 to 12, moderate, and 8 or less, severe brain injury.¹

Moderate to severe TBI in children generally produces deficits in cognitive, behavioral, and academic function, which can compromise long term development.

Outcomes range from complete recovery to survival with profound physical and cognitive deficits. In school age children and adolescents, recovery tends to follow a pattern of rapid improvement during the first 6 to 12 months after injury, with more gradual change thereafter.² Prognosis and recovery pattern for children injured during infancy or the preschool years are less certain. Initial research findings suggest that cognitive prognosis may not be as good for younger children in comparison to school age children.^{3,4}

Although mild TBI in adults usually results in some short term cognitive deficits, less is known about the influence of mild injury on cognition in children. Research findings are equivocal, although there is some suggestion that mild injury may have more influence on behavior than cognition. Despite the lack of consensus about the sequelae of mild TBI in children based on group data, it does appear that there are individual cases in which learning or behavior problems are associated with mild injury. Consequently, these children should also be monitored carefully. Mild injuries will not be further considered in this article.

Mechanisms of injury provide one basis for understanding sequelae of brain injury, and they vary somewhat with etiology. Common causes of TBI include falls from heights, motor vehicle accidents, sports and recreation-related injuries, and assaults. Predominant causes of TBI vary with developmental stage. Child abuse accounts for 25% of TBI in children under 2 years of age, falls and motor vehicle/pedestrian or bicycle accidents are more common in preschool and school age children, and high speed motor vehicle accidents are not an unusual cause of injury in adolescents.

The forces and/or mechanisms involved typically result in diffuse, diffuse and focal or multifocal injury. Primary injury mechanisms include both impact and inertial forces. Diffuse injuries result to some extent

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from shearing associated with acceleration and deceleration forces. Injuries to the frontal and temporal poles and to the inferior surface of the brain can result from the scraping of tissue across bony prominences. Focal and multi-focal injuries can occur as a result of coup and contra-coup effects. Secondary injuries can include hypoxia, hypertension, brain swelling and edema, infarction, and delayed hemorrhage.

Neurocognitive and Neurobehavioral Characteristics

During the immediate post-acute phase of recovery, injuries described above result in inefficiency in the operations of the brain. The inefficiency results in difficulty with information processing when tasks are complex, speeded, ambiguous, or require holding (i.e., maintaining information or representations internally and operating on them, for example, mathematic calculation done "in your head" rather than on paper).

The inefficiency and consequent information processing difficulty result in deficits across a variety of domains which are described below. The child may have difficulty retrieving information as well as comprehending information that is ambiguous, unfamiliar, complex, or presented rapidly. Retrieval difficulties influence performance in several areas, including expressive verbal and nonverbal information processing and memory. The inefficient processing usually results in difficulty with inhibition, which is a neurologically active rather than passive process. Disinhibition may influence cognitive and/or behavioral functioning. The addition of a focal injury may change this prototypical profile. For example, a left focal injury may result in greater verbal information processing and memory deficits.

Children who have sustained a moderate to severe TBI often undergo neuropsychological evaluation. This type of evaluation is appropriate because it provides assessment of levels of performance across a broad range of abilities, but especially because it provides interpretation of findings in the context of what is known about brain-behavior relationships in children and adolescents. Consequently, the findings are useful for medical follow-up as well as for planning educational and psychosocial interventions.

The characteristics described below represent the typical neuropsychological profile after a moderate to severe injury. That is, the effect of the brain inefficiency and resultant slowing and disinhibition on the various areas of information processing, memory, problem solving, visual motor and fine motor function. Of course, there will be variation across individual cases.

Intellectual

There is typically a relatively transient decline in

psychometrically measured general intellectual ability (Intelligence Quotient, [IQ]) during the immediate post-acute phase of recovery from TBI. Often the decline is in both verbal and nonverbal areas, but more so in nonverbal. Also, recovery tends to occur more rapidly in Verbal than in Performance IQ. Often, by one year post-injury there is only a deficit in Performance IQ. Recovery occurs most rapidly in the first 6 to 12 months post-injury, with continuing improvement possible up to 5 years post-injury. Of course, in many cases some deficit may remain in comparison to premorbid status, and some children may remain severely impaired.

Verbal Information-Processing and Memory

Verbal information-processing includes both receptive and expressive components. Simple receptive functions are often secure. However, expressive functions, which typically require more complex information processing, are often impaired. The frank aphasia sometimes seen after injury in adults is rare in children, but may occur to some extent with left focal injuries. Deficits are more subtle⁵ and often involve dysnomia (difficulty retrieving names of objects and people) as well as difficulty with fluency under external complex demand. These deficits may not be noticeable in the context of spontaneous conversation, and therefore will not be apparent during an office visit. The child may function very well in the pediatrician's office, but be totally lost in the language dense classroom. Verbal memory is characterized by retrieval deficits for rote tasks, but recognition memory and retrieval for connected (meaningful) text is generally spared.⁵

Nonverbal Information-Processing and Memory

Nonverbal information-processing includes various aspects of visual perception, visual motor integration and constructional abilities. Visual perception may be spared, or there may be some deficits in the more complex areas, such as in visual-spatial perception. Most often visual motor integration is imprecise.

Constructional difficulties may involve both poor organization and inaccuracy of details. These difficulties can have a basis in the visual motor and visual spatial deficits, but also in difficulty with planning and organization. Difficulty with organization may also be seen in areas other than visual, such as in language functions, as well as in daily living. Memory may be in the average range for recognition tasks, but is typically below average for constructional tasks.

Executive Functioning

Executive functioning involves the ability to initiate and sustain goal directed behavior. It is a large

and complex behavioral domain, consisting of many hierarchical levels from simple to complex. Functions include but are not limited to goal recognition and selection, planning, strategy generation and selection, sustained and focused attention, vigilance, inhibition of competing responses, monitoring and evaluation, planning and initiation of change, and closure. Executive functions are often impaired after moderate to severe traumatic brain injury. Neuropsychological assessment of this domain should include not only psychometric tests, but also questionnaires completed by significant others.⁶ Recovery can occur; however, longitudinal studies have not been completed and little is known about which outcome variables are most important for this area.

Motor Efficiency

Visual motor and fine motor coordination and speed are typically compromised. Fine motor functions are often one of the last areas to show significant recovery.

Academic Achievement

Sometimes previously acquired academic skills are not disrupted by brain injury. However, this may be dependent on the severity and type of injury, and is not true of all children who have sustained a brain injury. Further, even children who have maintained premorbid levels of skill will most likely not be able to continue acquiring skills at the same rate as their peers without supportive services in the academic context. They will have difficulty with new learning because of the slowing and loss of efficiency in the operations of the brain. It is vital for these children to have appropriate educational interventions during the recovery stages, or as long as indicated by progress.

Emotional and Behavioral Adjustment

There is increased risk for emotional and behavioral problems after TBI. However, premorbid characteristics and post-injury environment are very significant factors influencing outcome.⁷ In fact, although there is some correlation with severity of injury, it is lower than for cognitive areas.

Adjustment difficulties can occur as a direct result of the injury. TBI often results in some disinhibition, which is sometimes a basis for inappropriate or excessive behavior. Secondary emotional problems such as depression can occur because of the negative reinforcement resulting from inappropriate behavior, as well as because of losses associated with the accident or injury. Grief and guilt related to the incident or accident, as well as posttraumatic stress symptomatology can increase risk.

Premorbid behavioral difficulty can be intensified

by brain injury. As with cognitive functions, recovery or improvement can occur over time. However, it is important that problematic behaviors be well managed in order to prevent secondary problems. When the psychosocial situation is less than optimal, family and individual counseling will be important in order to encourage more optimal environment. In addition, some families will need case management to advocate and assist with obtaining all the services the injured individual or individuals and family will need.

Classroom Implications

Children in the early phases of recovery from brain injury will have difficulty keeping pace in traditional classroom settings. They will have difficulty understanding directions and instructional content. They will also experience difficulty with the efficient production of oral and written responses and with the completion of assignments. Problems in both comprehension and production may become especially noticeable when tasks involve novel information and/or complex and ambiguous contexts. Visual motor and fine motor slowing and inefficiency, as well as difficulty with visual motor integration will interfere with copying information and producing written assignments. Visual spatial and constructional deficits can also influence the child's ability to find their way around in the environment and to plan and organize their day.

It is vital that modifications and other kinds of assistance be provided to compensate for the academic and functional problems. Assistance should be based on results of neuropsychological evaluation, as well as ongoing diagnostic teaching. Generally, to compensate for the difficulty with rapid information processing, complexity, ambiguity, and holding, information should be presented more slowly, shortened, and simplified. In addition, external supports should be provided during activities requiring holding or internal representation and operation.

Supportive academic services for children with traumatic brain injury are mandated by the Individuals with Disabilities Education Act of 1990. An Individualized Education Plan (IEP) is an important part of the educational process. This plan should be reviewed frequently during the first two years post-injury, because of the rapid initial recovery and ongoing changes in neurocognitive function. The goal of educational intervention is to maintain the individual's premorbid rate of academic achievement to the extent possible. Cognitive slowing and other processing difficulties need not translate into slower acquisition of academic skills or knowledge.

Social Implications

Cognitive slowing and cognitive and behavioral

disinhibition can interfere with interactions in social contexts. The child may have difficulty with comprehension, especially in novel, ambiguous, or complex contexts, where information is quickly generated or contexts change quickly. There may be difficulty in quickly and/or efficiently generating responses. Consequently, the child may have difficulty keeping up with and behaving appropriately in social contexts. Peers may initially be accepting of this difficulty on the part of the injured individual, but eventually tend to begin to leave them out of activities. The individual may then withdraw socially as well. In some cases, injured individuals do well with social interactions for a period of time, but begin to have difficulty when there is a developmental change or an increased level of complexity in social skill expectation.

Supportive counseling should be provided for individuals who are experiencing difficulty with social interactions. In addition to assisting them in understanding and accepting their difficulty, some role playing, modeling, or other techniques to improve social interaction can be provided. Ongoing cognitive intervention can also assist with social comprehension and production. Peers, students, and school personnel may benefit from education about the needs of injured students during the school re-entry phase.

Primary Care Physician's Role

The PCP has a pivotal role in both prevention of injury and monitoring progress toward optimal recovery after injury.^{1,8} This includes anticipatory guidance for prevention of injury as well as of secondary problems after an injury. Monitoring of status and progress will need to cover many areas, including academic, psychosocial, family, and community functioning. Additional prevention activities include participation in studies of the effectiveness of various strategies, and advocacy for injury prevention legislation.¹

Prevention

The PCP role in the area of prevention includes anticipatory guidance for all families, with extra time spent with families at higher risk. High risk factors include adolescent developmental stage, poverty, living in congested residential areas, and parental marital instability.¹ More frequent and intense guidance will be needed for individuals at increased risk.

When providing anticipatory guidance, Rivara⁸ advises using specific rather than diffuse or shotgun messages, that is, phrases such as "use a car seat," "buy and use a bike helmet," "don't use baby walkers," rather than "be careful" or "childproof the home." He recommends the following recreational-related head injury prevention strategies: helmets for bicycling, horseback riding, roller blading, skateboarding, roller skating, hockey, sledding, skiing; use of materials such as sand, pea gravel, or wood chips rather than concrete, asphalt, or packed dirt for playground surfacing; playground equipment no more than 5 feet off

the ground. Recommended injury prevention strategies for falls during infancy and the preschool years include banning baby walkers and using gates for stairs. Use of motorcycle helmets and proper use of car restraints are recommended as prevention strategies for injuries associated with motor vehicle accidents.

Monitoring

Because traumatic brain injury can impact so many areas of life, it is vital that the pediatrician question the parents regarding status in several areas. The primary care physician should remain informed about the child's medical and rehabilitation course during hospitalization. Follow-up medical visits should begin soon after discharge, and parents and child should feel that their pediatrician is a member, in fact a manager, of their recovery team. In addition to medical status, academic and psychosocial functioning should be monitored with questions directed toward functioning in various contexts such as school, home, and community.

It is important to be aware of factors associated with increased risk for secondary problems and/or poor recovery from traumatic brain injury when monitoring the progress of an injured individual and their family. These factors include level of severity, premorbid problems (academic, emotional, or behavioral), developmental stage (infancy, early childhood, adolescence), posttraumatic stress symptomatology or other psychological or emotional reactions to the accident or incident, including grief and/or guilt, and dysfunctional or chaotic family or parenting style. When there are high risk factors, monitoring should be more frequent and intense.

When monitoring academic status and progress, it will be important to ask questions in such a way that necessary information is obtained. For instance, many times when parents are asked how a child is doing in school, they may reply that he/she is doing just fine. However, with further probing the interviewer may discover that the child was in fact retained and perhaps even placed in a self-contained classroom. It is very important to ask what type of classroom and grade the child is in, whether he passed or is expected to pass to the next grade, what his grades are like, whether there are concerns about his behavior, etc. Copies of the child's annual standardized achievement test scores can be requested and kept so progress can be tracked over time. This will help to identify decline or maintenance of level of achievement. Similarly, copies of the child's IEP should be maintained in his/her medical file. In fact, the pediatrician can become involved in the IEP planning and decision making process as indicated.

Monitoring psychosocial progress includes discussing status and progress at school, at home, and in the community. The physician can inquire about interpersonal relationships and about mood and behavior. Information can be obtained from family as well as from

school personnel. The most frequent adjustment problems involve depression and/or disinhibition resulting in inappropriate behavior or behavioral outbursts. Referrals for supportive counseling or for behavioral evaluation and intervention should be made as indicated. Finally, family functioning can be compromised because of the stress of the accident/incident as well as the difficulty caring for a child with brain injury. The physician can demonstrate empathy and provide support, and make referrals for family therapy or for supportive counseling for individual family members.

When indicated, it will be necessary to refer for other appropriate services. Neuropsychological evaluations should be obtained at the end of the acute medical phase, again at 6 months post-injury to assure recovery is occurring, and annually thereafter until there has been a plateau in recovery. Evaluations should be obtained as indicated thereafter, with emphasis during academic or other developmental or life transitions. Recommendations generated as a result of these evaluations will be helpful in monitoring and referring for appropriate services. However, PCP monitoring of academic, behavioral and emotional status will continue to be important between these evaluations.

Summary

Children who have sustained a moderate to severe TBI typically demonstrate some cognitive and behavioral deficits, especially early in the recovery phase. Optimal management of these deficits at school and in the family and community can result in improved long term outcome. The role of the primary care physician in monitoring progress is vital to optimal outcome. This role involves the areas of prevention as well as tracking progress in all areas of functioning after an injury.

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Resources:

- Special Education Coordinator for the child's school district
- Local Community Mental Health Center
- University of Arkansas for Medical Sciences Department of Pediatrics, Physical Medicine and Rehabilitation Section
- Brain Injury Association of Arkansas
- Office of Disabilities Prevention Arkansas Department of Health

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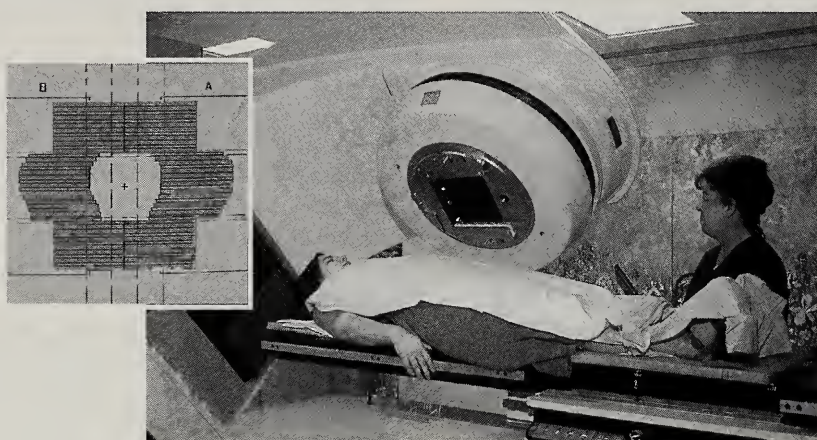
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Pregnancy and the Working Woman: A Review

Rosa Elia Seguin, M.D.*

Abstract

The potential impact of employment on pregnancy is an important issue that merits assessment, given the increasing numbers of women entering the labor force and continuing employment throughout pregnancy. A review of the literature evaluating the effects of employment on pregnancy is presented, including a brief historical and legal perspective, as well as employment statistics in the USA. There is emerging evidence from various studies suggesting that long working hours and prolonged standing may place a pregnancy at risk. Thus, physicians need to counsel their patients about these potential risks and provide recommendations for early modification of employment activities, in order to have a positive impact on pregnancy outcome.

Historical Perspective

Traditionally, employment during pregnancy was not well accepted and women were often forced to resign from their jobs when their pregnancy became evident. Employers used concern for the potential adverse effects of employment on a woman's existing or potential offspring as an excuse to deny women equal employment opportunities, limiting access to higher paying traditionally male jobs.¹

Legal Issues

It was not until the 1964 Civil Rights Act went into effect that benefits to pregnant working women were assured. This Act made gender-based discrimination illegal and thus assured that a woman's employment could not be jeopardized because of pregnancy. In addition, the Federal Pregnancy Discrimination Act of 1978 clarified the point that sex discrimination includes discrimination "on the basis of pregnancy, childbirth or related conditions."¹ The main thrust of this Act was to eliminate barriers to employment during

pregnancy. It also established the legal basis for health insurance coverage.

Subsequently, as a result of *International Union v. Johnson Controls*, the U.S. Supreme Court ruled in March of 1991 that federal law prohibits employers from excluding women from job categories on the basis that they are or might become pregnant.¹ Johnson Controls Inc., a company involved in the manufacture of batteries, had a "fetal protection policy" that restricted jobs to men and sterile women. All nine justices on the Supreme Court agreed that this policy was a violation of the law. This decision ultimately strengthened the Pregnancy Discrimination Act.

Employment Statistics

Women working outside of the home for payment is certainly not a new notion. However, the numbers of women in the workforce has dramatically expanded over the course of this century, particularly during and after World War II, when women went to work in great numbers. In the last few decades, the largest increase of working women has been in the age group 20-35, corresponding to the main reproductive age group.² Current estimates show that about 50% of childbearing age women in the USA are in the labor force, and according to *Business Week* of March 20, 1989, by the year 2000, 65% of the individuals entering the work force will be reproductive age women.

Thirty years ago, women quit their jobs during their first pregnancy and did not return to work until after the children left home.³ Today, more than one million women in the work force become pregnant each year, with 90% of these women working into the third trimester and 84% into the last month of pregnancy, according to *Current Population Report of 1990*. An increasing number of women now return to work six to eight weeks after delivery. These demographics have the potential to be of significance not only for childbearing and reproduction, but for maternal employment as well.

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Potential Hazards in the Workplace

The period of teratogenesis is concentrated in the first trimester of pregnancy, a time when many women are either unaware or uncertain of their pregnancy. Most women are usually well aware of the specific hazards they face at work. But this knowledge may be of limited value if an unknown pregnancy has occurred. Ideally, workplace hazards should be evaluated and taken into account prior to conception, since hazards may have their greatest effects on early embryonic and fetal development. The range of teratogens that have been identified is not extensive.² Some of the more common chemical hazards that may be encountered in the workplace during pregnancy include metals such as lead, mercury, or copper; gases such as carbon monoxide; passive smoking; insecticides; herbicides; solvents; drugs; and disinfecting agents. Lifting heavy loads and repetitive muscular work are some of the physical hazards that may be found at work. Biological hazards have also been noted, particularly in animal workers, where there have been reports of abortion after handling ewes infected with ovine chlamydia during lambing. In addition, contact in crowded places or with high risk groups, such as school children, may also pose a biological hazard to pregnant women because of the exposure to infectious agents.²

Psychologic Effects of Employment

The potential psychological effects of employment outside the home during pregnancy are complicated and difficult to evaluate fully. The relationships with a woman's colleagues at the workplace can be a positive feature, providing a potential social life which may be absent for women who stay at home.² Perhaps the most difficult aspect of the psychological effects of employment to evaluate is the stress employment may produce, usually related to economic need.⁴ There are some studies that have reported positive effects of job enjoyment, social support, and employer incentive benefits as reasons that pregnant women continue to work. In addition, the above factors have been associated with improved perinatal outcomes for select women.⁴

The reasons for employment or non-employment during pregnancy have been evaluated extensively. In one particular study,³ data from 210 women were gathered to identify factors that influence employment decisions during pregnancy. Some reasons given for working during pregnancy included self-actualization, escape from home, employment identity and interpersonal contacts. Others included money, financial obligations, and employment setting compatibility. Some of the reasons given by those women who were not working during pregnancy included the ability to juggle finances and employment setting incompatibility.

The authors of this study suggest that these results may form a basis for anticipatory guidance recommendations during pregnancy. Indeed, evaluating the reasons that pregnant women make their particular employment or non-employment decisions may have a great bearing on their psychologic health during this time period.

Physiologic Effects of Work during Pregnancy

The effects of all types of work in pregnancy including paid work outside the home, household chores and athletic activities on maternal and fetal health have been examined frequently over the last two decades. In many instances, the results of these studies are conflicting or inconsistent. The physiologic effects of work during pregnancy have also been evaluated. In animals, the extremes of work cause a reduction of blood from the viscera (including pelvic organs) in order to permit more blood to go to the muscles of the body.² This phenomenon also occurs in humans; however, measurement of these changes is much more difficult in human subjects. It is known that in most pregnancies, physiologic changes produced in the fetus by maternal exercise return to normal levels at a quick time interval when the activity stops, although this is known to happen more slowly in pregnancies with the presence of impaired fetoplacental circulation.⁵

In a recent study, the effects of maternal aerobic exercise on human placental development were analyzed.⁶ The histomorphometry of term placentae from women who exercised regularly throughout either the first half of pregnancy or all of pregnancy was compared to that of placentae from matched controls. Placental changes such as increased parenchymal volume, villous surface area and vascular volume were found in the group who exercised regularly. Physiologically these changes suggest increased placental perfusion and improved transport capability which may be protective of the fetus by maintaining oxygenation and fetal substrate availability during decreases in uterine blood flow. In active women, fetal heart rate increase is noted during and after regular exercise during late pregnancy in spite of decreases in placental blood flow and may be attributed to the findings in this study. The same is not true for sedentary pregnant women in whom sustained exercise has been noted to produce fetal bradycardia suggesting a decrease in placental blood flow.⁷ These findings may explain why healthy women who work and are physically active during pregnancy have fewer risk factors for adverse pregnancy outcomes than women who do not work.

Pregnancy Outcomes and Employment

As noted earlier, the potential effect of employ-

ment on a pregnant woman and her fetus is a difficult and complicated assessment. Many studies have examined occupational factors that might contribute to preterm delivery, especially standing, walking, heavy lifting and other aspects of physical exertion. Most research in this area has focused on the negative impact on maternal-fetal outcomes and results may be inconsistent due to the varying quality of data on physical activity.

One study analyzed 7,722 pregnancies and found that gestations were not shortened but newborns of women who worked in the third trimester weighed 150 to 400 grams less than newborns of mothers who stayed at home.⁸ These effects were found to be most severe when mothers had stand-up jobs, continued working until near term, were hypertensive or had children at home to care for when they returned from work. The authors attributed their findings to possibly reduced uteroplacental blood flow aggravated by the above factors. It is important to note however, that these data were collected between 1959 to 1966, an era when dietary restrictions were a widespread practice as was the liberal use of drugs to try to correct weight gain and dependent edema.

A number of studies indicate that there may be a relationship between strenuous and physically demanding employment and preterm labor. One such study of occupational factors in preterm birth conducted in France, reported that certain work requirements and environmental conditions were significantly associated with preterm birth.⁹ In 1977-1978, a total of 3,437 women were surveyed after giving birth. The study found that certain occupational categories were more prone to risk of prematurity than others. An analytical breakdown of the job into diverse components was performed which led to the definition of five sources of fatigue: posture, work on industrial machines, physical exertion, mental stress and a generally adverse working environment. When all the factors were analyzed, the only significant risk factors for prematurity were found to be occupational fatigue, previous premature birth, and parity. A relationship was found between occupational factors and premature birth but not between occupational factors and low birth-weight. Other studies have had essentially similar findings with a relationship noted between increased physical stress and prematurity.¹⁰ Heavy lifting and long hours of work have also been consistently related to adverse outcomes.

In one prospective study, preterm delivery was noted to be highest in women with standing occupations and lowest in those with active jobs, such as nurses and physicians.¹¹ In a sample of 1,206 women, the rate of preterm births in women whose jobs required prolonged standing was 7.7% compared to 4.2% vs. 2.8% for those with sedentary or active jobs, re-

spectively. The odds of preterm delivery in the standing groups was 2.72 (95% confidence interval of 1.24-5.95). The preterm rate of the standing groups was comparable to that found in previous similar studies. The physiologic mechanism for the relation between standing and preterm delivery remains unclear. The rate of low birthweight was not found to be different among the different groups.

The majority of recent studies indicate there is no significant association between standing jobs and low birthweight. However, a recent study of 4,259 pregnant women attending routine prenatal clinics in Denmark, revealed that standing or walking at work for 5 or more hours did increase the risk of preterm delivery threefold.¹² The risk of preterm delivery was found to be lowest in those patients with the highest social class and highest in those patients with previous preterm deliveries, previous spontaneous abortions, or extremely high or low prepregnant weights, and in patients who reported smoking, were unmarried or had low educational levels.

The relationship between physical activity during pregnancy, preterm birth and gestational age-adjusted birthweight was evaluated in a prospective study of 7,101 women who received prenatal care in one of five clinical centers in the USA from 1984 to 1987.¹³ This study is one of the few that evaluated both employment and nonemployment related physical activity. The investigators found that prolonged periods of standing (8 hours or longer per day) were associated with a small increased risk of preterm delivery; however, heavy work, defined as sufficient to cause sweating, was not associated with preterm birth. The authors concluded that there could be a place for restricted activity once women were experiencing complications. They also noted the possibility that unmeasured socioeconomic differences among women reporting different levels of activity could account for previous positive findings.

Finally, a study published in 1993 analyzed a stratified random sample of 9,953 births from the 1988 National Maternal and Infant Health Survey.¹⁴ Results showed that women who work during pregnancy have more favorable sociodemographic and behavioral risks for reproductive outcomes, known as the "healthy worker effect." They are more likely to be white, married, of higher incomes and education, to have medical insurance and are of lower parity than nonemployed pregnant women. The authors noted that many studies have depended on hospital based samples, non-USA data, or on cohorts which are not representative of the full spectrum of childbearing women. They conclude that their data confirm the importance of taking sociodemographic as well as behavioral characteristics of the mother into account in studying the effects of work-related exposures on pregnancy outcomes.

Conclusion

Review of the studies on pregnancy outcomes and employment reveals inconsistent results. Very few of the studies are prospective, some do not control for socioeconomic status or parity, others do not control for self-selection bias, and in some studies, gestational age was not assessed. Many use questionnaires that may introduce bias, especially if adverse pregnancy outcomes have occurred. As is evident, many confounding variables, both known and not known, are not always taken into account. Most studies looking at the effect of paid work on pregnancy have found adverse outcomes if there are adverse working conditions such as teratogenic exposure or very heavy physical work. Women whose occupation requires them to stand and walk for more than 5 hours per day should be advised to discuss with their employers a modification in their activities relatively early in pregnancy. Women can face a dilemma, they may not be able to restrict their activity despite the possible threat to their pregnancy because their salary and medical benefits are tied to their ability to continue working during pregnancy. In spite of these potential limitations, common sense should be used to avoid severe physical strain and obtain adequate periods of rest during the working day. Fortunately, most healthy pregnant women should be able to work for as long as they wish during pregnancy and maintain their normal activity levels. However, there is still much to be learned about the consequence of different types of work activities on pregnancy outcome.

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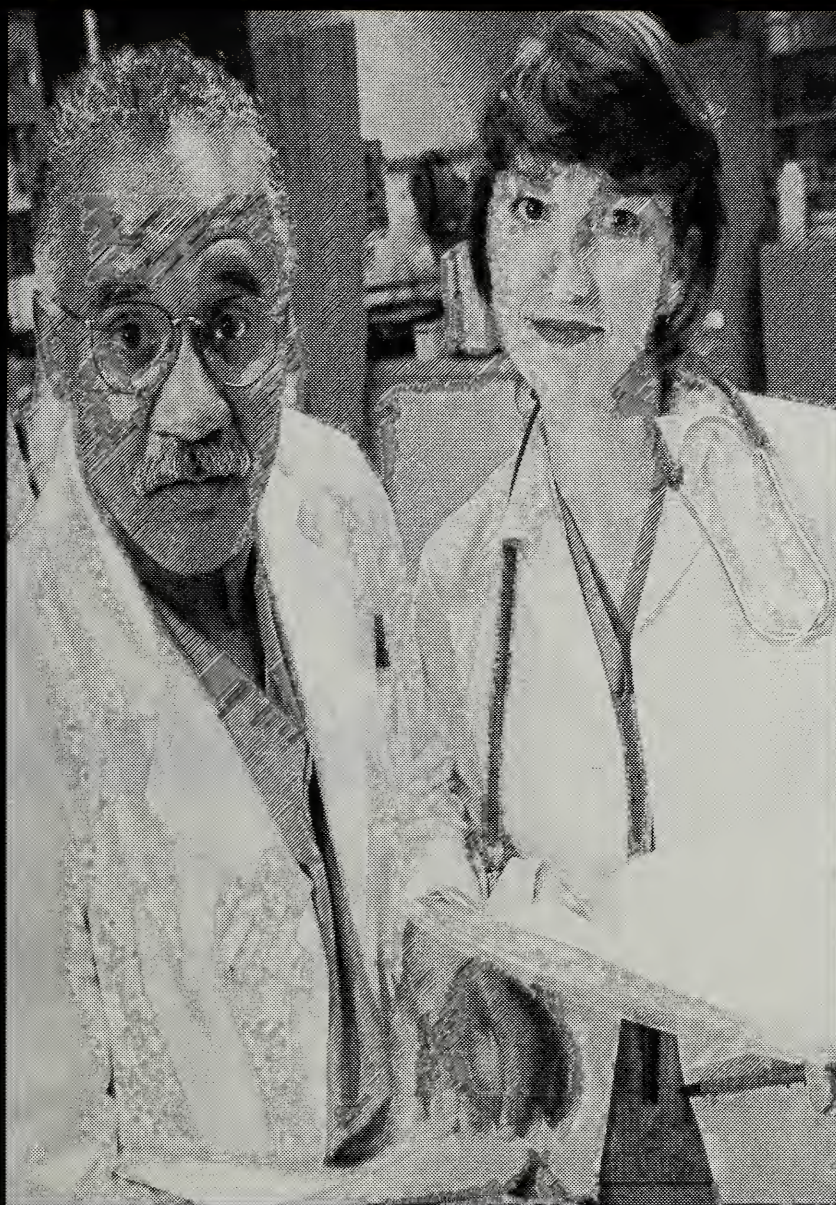
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Did the Team Know the Game Plan?

J. Kelley Avery, M.D.*

Case Report

The patient first went to the Ob/Gyn group for prenatal care when, according to the physician's examination, she was about 12 weeks into her first pregnancy. She gave her doctor a history of nausea since her last menstrual period and one previous episode of pelvic inflammatory disease two years before this visit. She related a family history of hypertension and heart disease.

Her initial examination revealed a short, obese (height 5 ft 1 in, weight 180 lb) young woman whose blood pressure was recorded at 100/80 mm Hg. The complete physical examination revealed only the enlarged uterus compatible with the menstrual history at 12 weeks gestation. The laboratory findings were all considered to be normal. The urine showed a "trace" of protein, thought to be due to vaginal mucous contamination. The blood glucose was recorded at 73 mg/dl. The CBC, including platelets, was normal. RPR, Sickledex, rubella immune, hepatitis B, and Rh antibody screen were all normal.

The routine visits occurred each month as scheduled, and at the 24th week of gestation the urine showed "large ketones." Glucola done that day was reported at 156 mg/dl. She was to return in four weeks to see her attending physician, and at the 28-week visit showed only a "trace of ketones." At 30 weeks there were no abnormal findings. The patient had gained only 11 lb since her first visit, her blood pressure had remained normal, and she had no complaints.

At 33 weeks the findings were "some swelling" and the AFM was positive. It was noted that because of the positive Glucola reported two months earlier, a glucose tolerance test (GTT) was needed as soon as possible. A week later she returned to the laboratory for the GTT, the results of which were: fasting 91, one hour 147, two hours 150, and three hours 151. The results were signed by a member of the three-physician group who was not her primary doctor. The following day she was seen by the office nurse and placed on a diabetic diet and given a one-hour consultation

by a nutritionist. Blood tests were done weekly for the following two weeks, and the glucose levels were normal. On visits at 37, 38, and 39 weeks gestation the blood glucose levels were normal. At 40 weeks by dates an ultrasonogram was reported as showing a fetal age of 36.2 weeks, and the further suggestion that the findings were compatible with intrauterine growth retardation (IGR). Again at 40.5 weeks ultrasound suggested IGR. There was a comment in the record, "Induce when favorable." A week later, with a blood glucose of 56 mg/dl, she was sent to the hospital for a non-stress test. Fetal heart monitor tracing was on file at the hospital, but without a comment as to any non-stress test.

Another member of the group admitted the patient to the hospital for induction, commented that she was at 41 plus weeks gestation, and wrote appropriate induction orders. Pitocin was begun at 8:00 AM. Three and one-half hours into the induction the fetal heart tone (FHT) was found to be between 80-100. When the patient was turned on her side, the FHT gradually returned to 130. The O₂ set-up was put in readiness for use. Labor was maintained with Pitocin, and five hours after induction was started, the note, "late decelerations to 80," appeared in the record. With a position change the rate rose to the 130 baseline. Six hours into labor "late decels noted." "Not in good labor yet. O₂ not in use." By this time the cervix was softening some and a fingertip could be inserted into the Os. Eight hours into the induced labor, consideration was given to stopping the Pitocin and planning a two-day induction. The Pitocin was discontinued and orders for a diet were given. After stopping the induction, the contractions continued but were ineffective. The patient was given medicine for pain and returned to the floor. Throughout this attempted induction the observation of "accels" was made several times.

The following morning Pitocin was restarted, with irregular contractions reported. About one hour after beginning again the note, "FHT unreactive," appeared in the record. The obstetrician was present, AROM carried out, and an internal monitor applied. A stat blood glucose was ordered and the report 15 minutes later was 39 mg/dl. Glucose was ordered stat. The FHT returned to 120-130 but BTB variability was much less than it had been throughout the labor. This seemed to

* Dr. Avery is Chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Co., Brentwood, TN. This article appeared in the May 1995 issue of the *Journal of the Tennessee Medical Association*. It is reprinted here with permission.

return to normal and the induction continued. Eight hours into the second attempt to induce labor the BTB variability was reported as "minimal to moderate." Two hours later "late decels" began to occur and continued. Although the patient was pushing with contractions, no progress was being made. Delivery by outlet forceps was attempted without success and a C-section was done.

The infant required intubation. Apgar scores were 1 at 1 minute, and 4 at 5 and 10 minutes, Cord blood pH was 6.6. Although the baby survived, he was a spastic quadriplegic, microcephalic, and had seizures.

A lawsuit was filed charging all three of the members of this Ob/Gyn group with negligence in permitting a gestational diabetic to go to 41 weeks without operative intervention and for failing to perform the C-section earlier in the course of the induction.

Loss Prevention Comments

How could a gestational diabetic patient be allowed to go to 41.5 weeks without intervention? Was there confusion about the significance of the ultrasonography suggesting a fetal age of at least two weeks less than the history would indicate and the possibility of IGR? What happened to the non-stress test that was ordered? Did all three members of this team know the plan for this patient? Several factors in this record suggest that the major problem in this case was the lack of communication between the physicians involved.

This was a three-member group. The patient was seen by all three at one time or another during the prenatal course. In some such groups this is routine, and the patient is informed that she will meet all of the members during the course of her pregnancy. There was a two-month delay between the abnormal Glucola test and the definitive GTT. This would suggest that the "left hand did not know what the right hand was doing." Nowhere does the record indicate that early intervention was planned. We would expect a note recognizing the gestational diabetes and commenting on the possible time that intervention would be done. At a critical time in the pregnancy, about 35 weeks, after the diagnosis had been made, the patient was seen by the office nurse to begin her diabetic diet. She was not seen again for two weeks. Again, we would have expected the documentation of some discussion with the patient about the possible need for a C-section. A good office nurse could have reminded the primary physician that the record was lacking a management plan.

Finally, in this very compromised patient, induction was begun by a member of the team who was not the attending physician; failing the first day, the second member of the team, again not the attending physician, continued the induction. The attending physi-

cian was the decision maker in proceeding with the C-section.

The signs of a stressed fetus were suggested on the first day of attempted induction. They were unmistakable on the second day, hours before the operation was done. Were the two members of the team who were following the induction reluctant to commit to the operation with the active presence of the attending physician?

Something about this tragic case involving three adequately trained specialists was confusing to them, and appropriate decisions were not made in a timely fashion. There were warning signs all around, and they were not seen and acted upon. From the record, it would seem that failure to plan together for the appropriate management of this young woman with gestational diabetes during her first pregnancy played a large part in this outcome. The group practice of obstetrics demands no less. ■

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Cardiology Commentary and Update

Don Steely, M.D.*
 Tamim Antakli, M.D.**
 Ateykin Ozdemir, M.D.**
 Tom Formicola***
 Joe Bissett*
 J. David Talley, M.D.*

Monitoring the Heart Rhythm Continuously for TWO Years!: The Implantable Syncope Monitor

A 56-year-old male with coronary artery disease, prior myocardial infarction, and normal left ventricular function had recurrent syncopal episodes. Despite multiple Holter monitor examinations, an electrophysiologic testing with an aggressive ventricular stimulation study, the etiology for the syncope remained a mystery. After a recent episode of syncope during which he fell and broke his glasses, it was decided to place a long-term continuous loop device monitor (Medtronic Inc., Minneapolis, MN, Figure 1).

Discussion

Syncope is a widespread medical problem, accounting for more than 1.5 million physician visits and 150,000 hospitalizations annually at a cost to the healthcare system of more than \$1 billion.^{1,2} Syncope accounts for approximately 5 percent of emergency department and hospital admissions.^{3,4} The average cost for an admission for syncope is more than \$5,000.²

Syncopal episodes frequently result in physical and emotional trauma. Physical injuries occur in nearly one-third of patients.⁴ Approximately 75 percent of syncope patients will alter some of their daily activities. Nearly 65 percent will restrict their driving and almost 40 percent will change their employment. Additionally, 75 percent of patients suffer anxiety or depression, especially if the problem is not diagnosed and properly treated.⁵

Diagnostic Methods. Despite the use of multiple diagnostic modalities, an estimated 40 percent of patients with syncope have no definitive diagnosis.⁶ Holter monitoring captures the ECG during a spontaneous syncopal episode in less than 10% of patients.⁷ While



Figure 1: The implantable syncope monitor consists of two components, the recorder and external activator. The recorder is implanted subcutaneously and attached to the left pectoral muscle. It weighs 17 grams and is 61 x 19 x 8 mm in size. The titanium alloy casing functions as the "lead" and the internal battery has a life of nearly two years.

an electrophysiological study is considered the definitive test to uncover the cause of syncope, the sensitivity and specificity of this test is disappointing. One recent study of patients with syncope, who had a "negative" electrophysiologic study, 60% of these patients were later found to have an arrhythmic cause.⁸ The diagnostic accuracy of an external event recorder is also wanting. These devices are helpful in less than one-fourth of patients.⁹

The Implantable Syncope Monitor. The implantable syncope monitor is an exciting new method to assist in the diagnosis of syncope. This device is designed to record the ECG that correlates with syncope, extend the monitoring period to more than a year, and to improve patient compliance. The device consists of two components: the recorder and external activator. The recorder is implanted subcutaneously, weighs 17 grams and is 61 x 19 x 8 mm. The titanium alloy casing functions as the "lead" and the internal battery has a life of nearly two years. The device continuously records an ECG into its looping memory and it can be programmed to store one event of 21 or 42 minutes or

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three events of seven or 14 minutes each. The activator is a hand-held, battery-operated telemetry device used by the patient to activate storage of the ECG recorded during the symptomatic syncopal event. When activated, the device stores the ECG, which can be downloaded into a monitor.

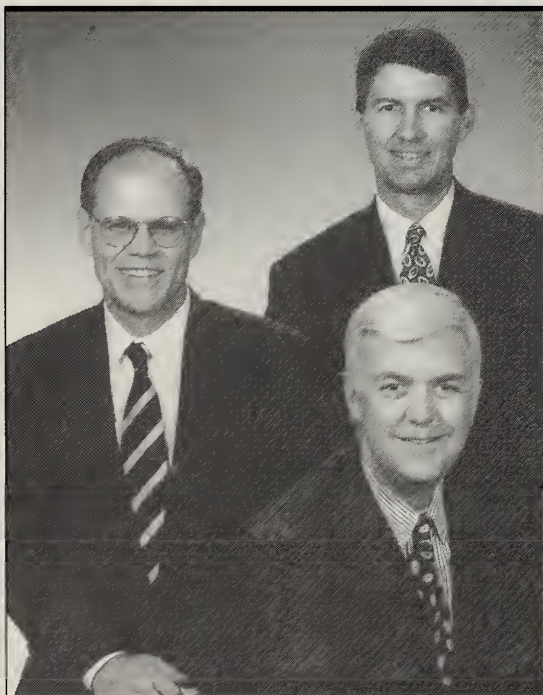
The value of implantable syncope monitor was documented in a study of 16 recurrent syncope patients who were undiagnosed after undergoing tilt table and electrophysiological studies. Spontaneous syncope recurred and the diagnostic ECG was captured in 15 of the 16 patients (94%), a range of 6 days to 15 months after the device was placed. In more than two-thirds of the patients, the diagnostic event occurred more than one month after implantation, and in 40% of patients, the event occurred more than six months after implantation.⁸

The diagnosis of unexplained syncope remains challenging for physicians and frustrating for patients. The implantable syncope monitor offers the promise to increase the probability of providing an etiology to this diagnostic enigma.

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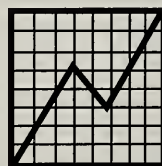
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Reported Cases of Selected Diseases in Arkansas Profile for May 1998

The three-month delay in the disease profile for a given month is designed to minimize any changes that may occur due to the effects of late reporting. The numbers in the table reflect the actual disease onset date, if known, rather than the date the disease was reported.

Disease Name	Total Reported Cases YTD 1998	Total Reported Cases YTD 1997	Total Reported Cases YTD 1996	Total Reported Cases 1997	Total Reported Cases 1996
Campylobacteriosis	50	55	69	175	241
Giardiasis	52	63	46	220	182
Salmonellosis	88	74	114	445	455
Shigellosis	69	61	35	273	176
Hepatitis A	35	120	236	223	500
Hepatitis B	40	39	42	106	93
Hepatitis C	2	3	4	5	7
Meningococcal Infections	21	25	26	38	35
Viral Meningitis	3	10	11	26	38
Ehrlichiosis	4	3	1	22	7
Lyme Disease	5	8	15	27	27
Rocky Mtn Spotted Fever	6	7	6	31	22
Tularemia	5	9	9	24	24
Measles	0	0	0	0	0
Mumps	0	0	0	3	1
Gonorrhea	1122	1926	2005	4388	5050
Syphilis	112	241	387	394	706
Pertussis	16	5	3	60	14
Tuberculosis	42	80	90	200	225

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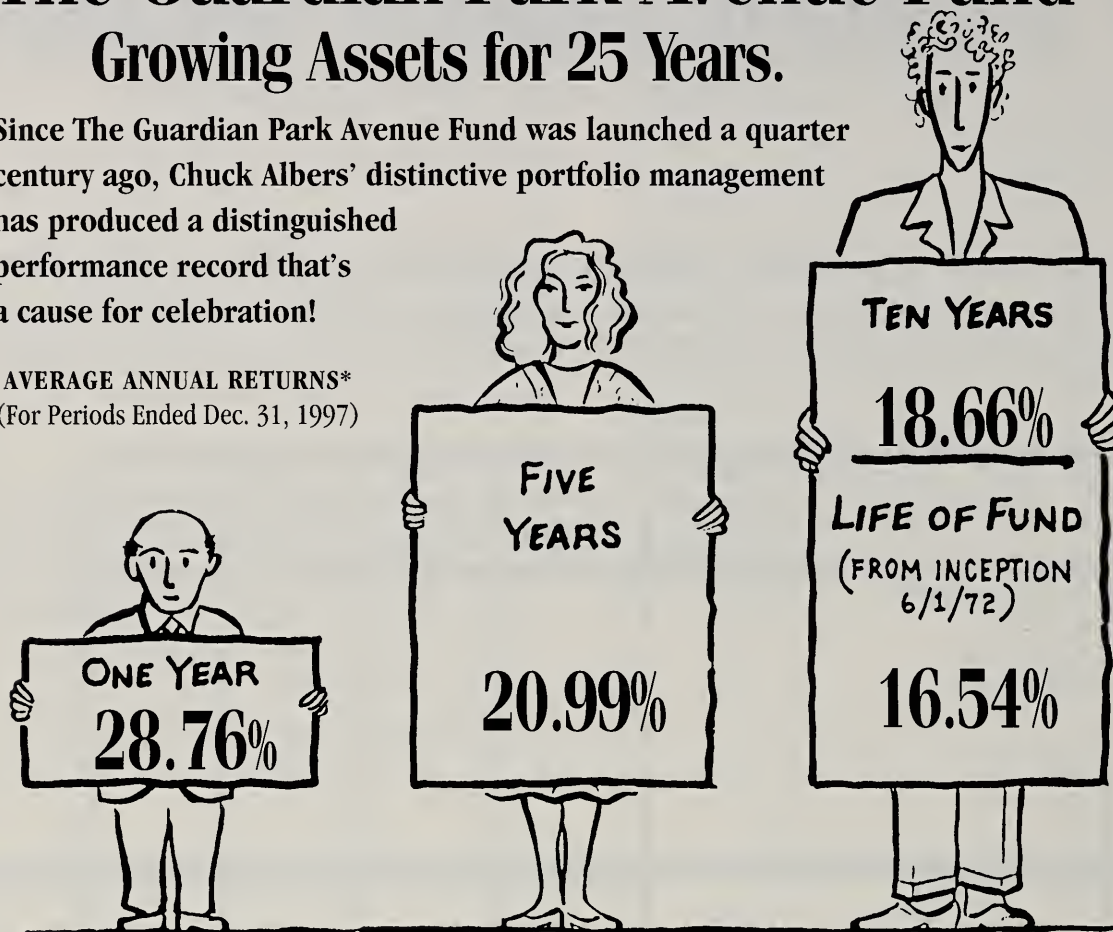
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Lu, Eugene, Pediatrics. Medical Education, UAMS, 1995. Internship/Residency, Arkansas Children's Hospital, 1996/1998.

Marotti, Tonya LeAnn, Neonatology Pediatrics. Medical Education, UAMS, 1992. Internship/Residency/Fellowship, UAMS, Arkansas Children's Hospital, 1993/1995/1998. Board certified.

McLaughlin, Shannon G., Geriatrics/Internal Medicine. Medical Education, UAMS, 1989. Internship/Residency, UAMS, 1990/1992.

Redding, Allen Harold, Endocrine & Metabolism. Medical Education, Louisiana State University Medical Center, Shreveport, 1988. Internship/Residency, Medical College of Virginia, 1989/1991. Board certified.

Saucedo, Jorge Felix, Cardiology. Medical Educa-

tion, Universidad Nacional Autonoma de Mexico, Mexico City, 1989. Residency, Instituto Nacional de la Nutricion Salvador Zubiran, Mexico City, Mexico, 1992. Fellowships, Instituto Nacional de Cardiologia Ignacio Chavez, Mexico, 1995; University of Michigan Hospitals, Ann Arbor, 1996; and Washington Hospital Center, Washington DC, 1998.

Shaver, Mary Jo, Internal Medicine-Nephrology. Medical Education, UAMS, 1993. Internship/Residency, UAMS, 1994/1996. Board certified.

Stout, Paul Wade, Pathology. Medical Education, UAMS, 1993. Internship/Residency, UAMS, 1994/1998.

Wornock, J.P., Family Practice. Medical Education, UAMS, 1995. Internship/Residency, UAMS, 1996/1998.

NEWPORT

Lumsden, Robert M. II, Orthopedic Surgery. Medical Education, University of California School of Medicine, San Francisco, 1963. Internship, University of California, Los Angeles, 1964. Residency, University of California, San Francisco, 1969. Board certified.

NORTH LITTLE ROCK

McGhee, Michael Andrew, Otolaryngology. Medical Education, UAMS, 1993. Internship/Residency, 1994/1998.

PARAGOULD

Hendrix, Barry D., Family Practice. Medical Education, UAMS, 1995. Internship/Residency, UAMS, AHEC-Southwest, 1996/1998.

Hendrix, Lisa Michelle, Family Practice. Medical Education, UAMS, 1995. Internship/Residency, UAMS, AHEC-Southwest, 1996/1998.

RUSSELLVILLE

Khan, Muhammad A., Cardiology. Medical Education, Rawalpindi Medical College, Pakistan, 1990. Internship/Residency, The Brooklyn Hospital Center, New York, 1992/1994. Board certified.

SEARCY

Hannah, James Todd, Obstetrics/Gynecology. Medical Education, UAMS, 1994. Internship/Residency, UAMS, 1995/1998.

SHERIDAN

Heise, Brian Allan, Emergency Medicine. Medical Education, Louisiana State University Medical Center, Shreveport, 1995. Internship, 1996.

SPRINGDALE

Wharton, James R., Dermatology. Medical Education, University of South Carolina Medical School, Columbia, South Carolina, 1994. Internship/Residency, UAMS, 1995/1998.

OUT OF STATE

Kempson, Steven Eugene, Family Practice. Medi-

cal Education, UAMS, 1995. Internship/Residency, AHEC-Southwest, 1996/1998. Board pending.

Rodriguez, Johnny Ray, General & Vascular Surgery. Medical Education, College of Osteopathic Medicine of Oklahoma State University, Tulsa, 1989. Internship, CESOH, Jefferson City, Missouri, 1990. Residency Genesys Flint Campus, Michigan, 1994. Fellowship, Vascular Surgeons of Central Ohio, Columbus, 1995. Board eligible.

Rodriguez, Linda Marie, Family Practice. Medical Education, Kirksville College of Osteopathic Medicine, Missouri, 1989. Internship, CESOH, Jefferson City, Missouri, 1990. Residency, Genesys St. Joseph Campus, Flint, Michigan, 1994. Board certified.

RESIDENTS

Bailey, W. Brian, Internal Medicine. Medical Education, UAMS, 1998. Internship/Residency, UAMS.

Brock, Wade D., Ophthalmology. Medical Education, UAMS, 1998. Internship, Tucson Hospitals Medical Education Program, Inc., Tucson. Residency, UAMS.

Brown, Columbus, Internal Medicine. Medical Education, UAMS, 1998. Internship/Residency, UAMS.

Buffalo, Ryan Paul, Family Practice. Medical Education, UAMS, 1998. Internship, Northwest Arkansas Family Practice Residency.

Burke, Richard Aron, Family Practice. Medical Education, University of Missouri School of Medicine, Kansas City, 1998. Internship, Northwest Arkansas Family Practice Residency.

Butler, Kathleen Victoria, Pediatrics. University of Texas Medical Branch, Galveston, 1998. Internship/Residency, UAMS.

Cavaneau, Jerry Nicholas, Family Practice. Medical Education, UAMS, 1998. Residency, UAMS, AHEC-Southwest.

Cowherd, Kristy Clinton, Family Practice. Medical Education, UAMS, 1998. Internship/Residency, UAMS, AHEC-Pine Bluff.

Dickson, Scott Michael, Family Medicine. Medical Education, UAMS, 1998. Residency, UAMS, AHEC-Northeast.

Dory, Jeffrey Lee, Pediatrics. Medical Education, University of Texas Medical School, Houston, 1998. Internship/Residency, UAMS.

Ferrill, Shelley Christene, Family Practice. Medical Education, University of Texas Southwestern Medical School, Dallas, 1998. Internship, Northwest Arkansas Family Practice Residency.

Guinn, Robby Charles, Family Practice. Medical Education, Oklahoma State University College of Osteopathic Medicine, Tulsa, 1998. Internship, Northwest Arkansas Family Practice Residency.

Hoskins, Gregory C., Emergency Medicine. Medical Education, University of Kentucky Medical College, Lexington, 1998. Internship/Residency, UAMS.

Kasthuri, Saravanan, Radiology. Medical Education, Coimbatore Medical College, India, 1992. Intern-

ship, Nassau County Medical Center, East Meadow, New York, 1996. Residency, University of Tennessee Center for Health Sciences, Memphis.

Khassawneh, Basheer Yousuf, Internal Medicine. Medical School, Jordan University of Science & Technology, Jordan, 1993. Internship/Residency, UAMS, 1995/1997. Fellowship, UAMS.

Knox, Christopher Glenn, Family Practice. Medical Education, UAMS, 1998. Internship, Northwest Arkansas Family Practice Residency.

Lee, Ronnie Dave, Family Practice. Medical Education, UAMS, 1998. Internship, Northwest Arkansas Family Practice Residency.

Luelf, Claire Jean, Psychiatry. Medical Education, UAMS, 1998. Residency, UAMS.

Miller, Matthew Wayne, Family Practice/Obstetrics. Medical Education, Wayne State University School of Medicine, Detroit, Michigan, 1995. Internship, St. Francis Family Practice Residency, Beech Grove, Indiana, 1996. Residency, St. Francis Family Practice Residency, Beech Grove, Indiana, 1998. Fellowship, Uni-

versity of Tennessee Center for Health Sciences, Memphis.

Nguyen, Xuan-Mai T., Internal Medicine/Radiology. Medical Education, University of Texas Medical Branch, Galveston, 1997. Internship, Medical College of Wisconsin, Milwaukee, 1998. Residency, UAMS.

Priest, Dean B., Jr., Psychiatry. Medical Education, UAMS, 1998. Internship, UAMS.

Pritchett, Daniel P., Emergency Medicine. Medical Education, Medical College of Georgia, Augusta, 1998. Residency, UAMS.

Strain, Lisa Diane, Family Practice. Medical Education, University of Illinois College of Medicine, Chicago, 1998. Internship, Northwest Arkansas Family Practice Residency.

Thomas, Debra J., Surgery. Medical Education, Northwestern University Medical School, Chicago, 1997. Internship, UAMS.

Thomas, Wesley C., Family Practice. Medical Education, UAMS, 1998. Internship, Northwest Arkansas Family Practice Residency.



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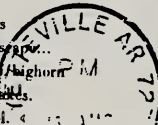
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To
*those physicians who volunteer
 through the Arkansas Health
 Care Access Foundation,
 Thank You!*
*As you can see from a sampling of
 letters we have received, your
 involvement in our program is
 appreciated and in many
 cases life-saving.*

It has been three days since you sent me to the doctor and I have a ways to go to be 100%, but I can breathe and walk across the room now. I had given up hope almost, and I remembered Arkansas Health Care. The doctor gave me two of the medicines I needed and the pharmacy you sent me to filled the antibiotics. Your doctor even "chewed" me out for not coming in two weeks previously. I'm starting to feel good again. God bless you.

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As Easterners moved West, pioneers found animals as exotic as the landscape... buffalo, prairie dogs, bears, beaver, bighorn sheep, cougars, wolves and rattlesnakes. The eagle became a national symbol.



I would like to say thank you first of all. Your program made it possible for me to have a mammogram when I had no where else to turn. I did not realize there was such a program. ...it is a much needed program. Thanks again.

I wanted to thank everyone involved with this program. We had no one else to turn to and we were in desperate need of doctors and medications. Your program has helped us through a very difficult time.

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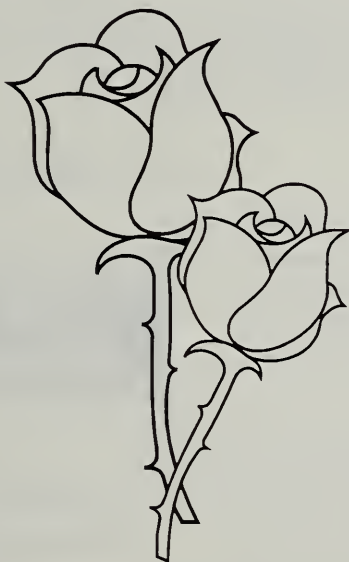
THANK YOU FOR MAKING THE DIFFERENCE!

Harold Bernard Hawley, M.D.

Dr. Harold Bernard Hawley of Little Rock died Tuesday, July 7, 1998. He was 71. He is survived by a son and daughter-in-law, George Taylor, II, and Keri Anne Hawley of Downers Grove, Illinois; daughter and son-in-law, Sylvia and Edward William Goodyear, Jr., of Charlotte, North Carolina; brother Curtis Hawley of Laurel, Mississippi; grandchildren, George Taylor Hawley, III, Amy Matson Goodyear, Edward William Goodyear, III, Amanda Allen Young and Jason Taylor Young. Dr. Hawley was preceded in death by his wife and daughter, Lydia Hawley Young.

Keith B. Kennedy, M.D.

Dr. Keith B. Kennedy of West Memphis died Wednesday, July 1, 1998. He was 75. He is survived by his wife, Katherine; daughter, Jean Williams of Cabot; brother, Harvey William Kennedy, Jr., of Phoenix, Arizona; grandchildren, Stephen and Danielle Williams.



Things To Come

September 25-27, 1998

Comprehensive Gynecology: A Clinical Update for the Practicing Physician. Crowne Plaza Manhattan, New York, New York. Sponsored by the Center for Bio-Medical Communication, Inc. For more information, call 201-385-8080 ext. 26.

October 1 - 3, 1998

Contemporary Cardiothoracic Surgery. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

October 14 - 18, 1998

1998 Infectious Disease Board Review: A Comprehensive Review for Board Preparation. Ritz-Carlton Hotel, Tysons Corner, McLean, Virginia. For more information, call the Center for Bio-Medical Communication, Inc., at 201-385-8080, extension 26.

October 15 - 16, 1998

24th Annual Symposium on Obstetrics & Gynecology. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

October 17, 1998

Urinary Incontinence and Female Urology. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

October 23 - 24, 1998

5th Annual Cancer Update for Primary Care Providers. Hyatt Regency, New Orleans, Louisiana. Sponsored by the Alton Ochsner Medical Foundation and the American Cancer Society, Mid-south Division. For more information, call 504-842-3702 or 1-800-778-9353.

October 30 - 31, 1998

3rd Annual Fingers to Toes: Comprehensive Orthopaedic Review Course for Primary Care Physicians. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

November 6 - 7, 1998

Minimally Invasive Surgery at the Millennium. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Institute for Minimally Invasive Surgery and the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

December 12, 1998

Contemporary Management of Acute Myocardial Infarction. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

Arkansas Foundation for Medical Care 1998 Quarterly Video Conferences:

Video conferences, Third Thursday of the month, once a quarter. Time: 12 noon to 1:30 p.m. Dates: August 20 and November 19. Location: UAMS education building/AHECs and Rural Hospital Affiliates.

For more information,
contact Patricia Williams or Cindy Jones
at 501-649-8501, ext. 203.

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Keeping Up

August 25, 1998

Annual Meeting of the Arkansas Society of Parenteral and Enteral Nutrition - UAMS Walton Auditorium. Sponsored by UAMS College of Medicine. For more information, call (501) 661-7962.

September 8, 15, 22, & 29, 1998

Physician's - ACLS, St. Joseph's Regional Health Center, Mercy Room, Hot Springs. For more information, call 501-622-1024.

September 24, 1998

Asthma - North Arkansas Regional Medical Center Conference Room 1, Harrison. Time: Noon. Sponsored by North Arkansas Regional Medical Center. For more information, call 870-365-2098.

October 20, 1998

Special Program with Senator Jay Dickey, St. Joseph's Regional Health Center, Mercy Room, Hot Springs. For more information, call 501-622-1024.

October 13, 1998

Osteoporosis - North Arkansas Regional Medical Center Conference Room, Harrison. Time: Noon. Sponsored by North Arkansas Regional Medical Center. For more information, call 870-365-2098.

November 3, 1998

Head and Neck Cancer - North Arkansas Regional Medical Center Conference Room, Harrison. Time: Noon. Sponsored by North Arkansas Regional Medical Center. For more information, call 870-365-2098.

Recurring Education Programs

The following organizations are accredited by the Arkansas Medical Society to sponsor continuing medical education for physicians. The organizations named designate these continuing medical education activities for the credit hours specified in Category 1 of the Physician's Recognition Award of the American Medical Association.

FAYETTEVILLE-VA MEDICAL CENTER

Medical Grand Rounds/General Medical Topics, Thursdays, 12:00 noon, Auditorium, Bldg. 3

FAYETTEVILLE-WASHINGTON REGIONAL MEDICAL CENTER

Chest Conference, 1st Wednesday of every month, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Primary Care Conferences, every Monday, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Tumor Conference, every Thursday, 7:30 - 8:30 a.m., WRMC, Baker Conference Center, no fee, breakfast provided

HARRISON-NORTH ARKANSAS MEDICAL CENTER

Cancer Conference, 4th Thursday, 12:00 noon, Conference Room

HOT SPRINGS-ST. JOSEPH'S REGIONAL HEALTH CENTER

Business Meeting, 1st Tuesday of each month, 12:00 noon, NPMC on Sept. 1st and Mercy Room at St. Joseph's on October 6th. Lunch provided.

Grand Rounds, Starting in October, 2nd Tuesday of each month, 12:00 noon, St. Joseph's Mercy Room. Lunch provided.

LITTLE ROCK-ST. VINCENT INFIRMARY MEDICAL CENTER

Cancer Conferences, Thursdays, 12:00 noon, Southwestern Bell/Arkla room. Lunch provided.

General Surgery Grand Rounds, 1st Thursday, 7:00 a.m. Southwestern Bell/Arkla Room. Light breakfast provided.

Interdisciplinary AIDS Conference, 2nd Friday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.

Journal Club, Tuesdays, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.

Pulmonary Conference, 4th Wednesday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.

LITTLE ROCK-BAPTIST MEDICAL CENTER

Breast Conference, 3rd Thursday, 7:00 a.m., J.A. Gilbreath Conference Center

Gastroenterology/Surgery Journal Club, dates vary, AR Gastroenterology Memorial Medical Plaza, Suite 3A. Call 501- 202-2673 or 202-3888 for more information.

G.I. Problems Conference, 3rd Tuesday every other month beginning in April, 6:30 to 8:00 p.m., Shuffield Auditorium

Grand Rounds Conference, Wednesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.

Multidisciplinary Trauma Conference, 3rd Thursday each month, 5:00 to 6:00 p.m., location varies, call 501-202-2673 or 202-1406.

Pulmonary Conference, Tuesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.

Sleep Disorders Case Conference, Twice monthly, 12:00 noon. Call BMC ext. 2673 for dates and location. Lunch provided.

MOUNTAIN HOME-BAXTER COUNTY REGIONAL HOSPITAL

Lecture Series, 3rd Tuesday, 6:30 p.m., Education Building

Tumor Conference, Tuesdays, 12:00 noon, Carti Boardroom

The University of Arkansas College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor the following continuing medical education activities for physicians. The Office of Continuing Medical Education designates that these activities meet the criteria for credit hours in category 1 toward the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

LITTLE ROCK-ARKANSAS CHILDREN'S HOSPITAL

*Faculty Resident Seminar, 3rd Thursday, 12:00 noon, Sturgis Auditorium
Genetics Conference, Wednesdays, 1:30 p.m., Conference Room, Springer Building
Infectious Disease Conference, 2nd Wednesday, 12:00 noon, 2nd Floor Classroom
Pediatric Grand Rounds, Tuesdays, 8:00 a.m., Sturgis Bldg., Auditorium
Pediatric Neuroscience Conference, 1st Thursday, 8:00 a.m., 2nd Floor Classroom
Pediatric Pharmacology Conference, 5th Wednesday, 12:00 noon, 2nd Classroom
Pediatric Research Conference, 1st Thursday, 12:00 noon, 2nd Floor Classroom*

LITTLE ROCK-UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

*ACRC Multi-Disciplinary Cancer Conference (Tumor Board), Wednesdays, 12:00 noon, ACRC 2nd floor Conference Room.
Anesthesia Grand Rounds/M&M Conference, Tuesdays, 6:00 a.m., UAMS Education III Bldg., Room 0219.
Autopsy Pathology Conference, Wednesdays, 8:30 a.m., VAMC-LR Autopsy Room.
Cardiology-Cardiovascular & Thoracic Surgery Conference, Wednesdays, 11:45 a.m., UAMS, Shorey Bldg., room 3S/06
Cardiology Grand Rounds, 2nd & 4th Mondays, 4:00 p.m., UAMS Shorey Bldg., 3S/06
Cardiology Morning Report, every morning, 7:30 a.m., UAMS, Shorey Bldg. room 3S/07
Cardiothoracic Surgery M&M Conference, 2nd Saturday each month, 8:00 a.m., UAMS, Shorey Bldg. room 2S/08
CARTI/Searcy Tumor Board Conference, 2nd Wednesday, 12:30 p.m., CARTI Searcy, 405 Rodgers Drive, Searcy.
Centers for Mental Healthcare Research Conference, 1st & 3rd Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research
CORE Research Conference, 2nd & 4th Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research
Endocrinology Grand Rounds, Fridays, 12:00 noon, ACRC Bldg., Sam Walton Auditorium, 10th floor
Gastroenterology Grand Rounds, Thursdays, 4:00 p.m., UAMS Hospital, room 3D29 (1st Thurs. at ACH)
Gastroenterology Pathology Conference, 4:00 p.m., 1st Tuesday each month, UAMS Hospital
GI/Radiology Conference, Tuesdays, 8:00 a.m., UAMS Hospital, room 3D29
In-Vitro Fertilization Case Conference, 2nd & 4th Wednesdays each month, 11:00 a.m., Freeway Medical Tower, Suite 502 Conf. rm
Medical/Surgical Chest Conference, each Monday, 4:00 p.m., UAMS Hospital, room M1/293
Medicine Grand Rounds, Thursdays, 12:00 noon, UAMS Education II Bldg., room 0131
Medicine Research Conference, one Wednesday each month, 4:30 p.m. UAMS Education II Bldg. room 0131A
Neuropathology Conference, 2nd Wednesday each month, 4:00 p.m., AR State Crime Lab, Medical Examiner's Office
Neurosurgery, Neuroradiology & Neuropathology Case Presentations, Thursdays, 4:00 p.m., UAMS Hospital OB/GYN Fetal Boards, 2nd Fridays, 8:00 a.m., ACH Sturgis Bldg.
OB/GYN Grand Rounds, Wednesdays, 7:45 a.m., UAMS Education II Bldg., room 0141A
Ophthalmology Problem Case Conference, Thursdays, 4:00 p.m., UAMS Jones Eye Institute, 2 credit hours
Orthopaedic Basic Science Conference, Tuesdays, 7:30 a.m., UAMS Education II Bldg., room B/107
Orthopaedic Bibliography Conference, Tuesdays, Jan. - Oct., 7:30 a.m., UAMS Education II Bldg.
Orthopaedic Fracture Conference, Tuesdays, 9:00 a.m., UAMS Education II Bldg., room B/107
Orthopaedic Grand Rounds, Tuesdays, 10:00 a.m., UAMS Education II Bldg., room B/107
Otolaryngology Grand Rounds, 2nd Saturday each month, 9:00 a.m., UAMS Biomedical Research Bldg., room 205
Otolaryngology M&M Conference, each Monday, 5:30 p.m., UAMS Otolaryngology Conf. room
Perinatal Care Grand Rounds, every Tuesday, 12:15 p.m., BMC, 2nd floor Conf. room
Psychiatry Grand Rounds, Fridays, 11:00 a.m., UAMS Child Study Center Auditorium
Surgery Grand Rounds, Tuesdays, 8:00 a.m., ACRC Betsy Blass Conf.
Surgery Morbidity & Mortality Conference, Tuesdays, 7:00 a.m., ACRC Betsy Blass conference room, 2nd floor
NLRVA Geriatric/Medicine Grand Rounds, Thursdays, 8:00 a.m., VAMC-NLR, Bldg 68, room 130
VA Medical Service Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D109
VA Pathology-Hematology/Oncology-Radiology Patient Problem Conference, Thursdays, 8:15 a.m., VAMC-LR, room 2E142
VA Psychiatry Difficult Case Conference, 4th Monday, 12:00 noon, VAMC-NLR, Mental Health Clinic
VA Lung Cancer Conference, Thursdays, 3:00 p.m., VAMC-LR, room 2E142
VA Medical Service Teaching Conference, Thursdays, 8:00 a.m., VAMC-NLR, Bldg. 68 room 130
VA Medicine-Pathology Conference, Tuesday, 2:00 p.m., VAMC-LR, room 2D109
VA Medicine Resident's Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D08
VA Physical Medicine & Rehab Grand Rounds, 4th Friday, 11:30 a.m., VAMC-NLR Bldg. 68, room 118 or Baptist Rehab Institute
VA Surgery Grand Rounds, Thursdays, 12:45 p.m., VAMC-LR, room 2D109, 1.25 credit hours
VA Topics in Rehabilitation Medicine Conference, 2nd, 3rd, & 4th Thursdays, 8:00 a.m., VAMC-NLR Bldg. 68, room 118
VA Weekly Cancer Conference, Monday, 3:00 p.m., VAMC-LR, room 2E-142
White County Memorial Hospital Medical Staff Program, once monthly, dates & times vary, White County Memorial Hospital, Searcy*

EL DORADO-AHEC

*Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., Warner Brown Campus, 6th floor Conf. Rm.
Behavioral Sciences Conference, 1st & 4th Friday, 12:15 p.m., AHEC - South Arkansas
Chest Conference, 3rd Wednesday, 12:15 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.*

Dermatology Conference, 1st Tuesdays and 1st Thursdays, AHEC - South Arkansas
GYN Conference, 2nd Friday, 12:15 p.m., AHEC-South Arkansas
Internal Medicine Conference, 1st, 2nd & 4th Wednesday, 12:15 p.m., AHEC-South Arkansas
Noon Lecture Series, 2nd & 4th Thursday, 12:00 noon, Union Medical Campus, Conf. Rm. #3. Lunch provided.
Obstetrics-Gynecology Conference, 4th Thursday, 12:15 p.m., AHEC - South Arkansas
Pathology Conference, 2nd Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5. Lunch provided.
Pediatric Conference, 3rd Friday, 12:15 p.m., AHEC - South Arkansas
Pediatric Case Presentation, 3rd Tuesday, 3rd Friday, AHEC - South Arkansas
Surgical Conference, 1st, 2nd & 3rd Monday, 12:15 p.m., AHEC - South Arkansas
Tumor Clinic, 4th Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5, Lunch provided.
VA Hematology/Oncology Conference, Thursdays, 8:15 a.m., VAMC-LR Pathology conference room 2E142

FAYETTEVILLE-AHEC NORTHWEST

AHEC Teaching Conferences, Tuesdays & Wednesdays, 12:00 noon, AHEC Classroom
AHEC Teaching Conferences, Fridays, 12:00 noon, AHEC Classroom
AHEC Teaching Conferences, Thursdays, 7:30 a.m., AHEC Classroom
Medical/Surgical Conference Series, 4th Tuesday, 12:30, Bates Medical Center, Bentonville

FORT SMITH-AHEC

Grand Rounds, 12:00 noon, first Wednesday of each month, Sparks Regional Medical Center
Neuroradiology Conference, 1st Tuesday of each month, 12:00 noon, Sparks Regional Medical Center, 7th floor dining room
Neuroscience & Spine Conference, 3rd Wednesday each month, 12:00 noon, St. Edward Mercy Medical Center
Tumor Conference, Mondays, 12:00 noon, St. Edward Mercy Medical Center
Tumor Conference, Wednesdays, 12:00 noon, Sparks Regional Medical Center

JONESBORO-AHEC NORTHEAST

AHEC Lecture Series, 1st & 3rd Tuesday, 12:00 noon, Stroud Hall, St. Bernard's Regional Medical Center. Lunch provided.
Arkansas Methodist Hospital CME Conference, 7:30 a.m., Hospital Cafeteria, Arkansas Methodist Hospital, Paragould
Chest Conference, 2nd Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Citywide Cardiology Conference, 3rd Thursday, 7:30 p.m., Jonesboro Holiday Inn
Clinical Faculty Conference, 5th Tuesday, St. Bernard's Regional Medical Center, Dietary Conference Room, lunch provided
Craighead/Poinsett Medical Society, 1st Tuesday, 7:00 p.m. Jonesboro Country Club
Greenleaf Hospital CME Conference, monthly, 12:00 noon, Greenleaf Hospital Conference Room. Lunch provided.
Independence County Medical Society, 2nd Tuesday, 6:30 p.m., Batesville Country Club, Batesville
Interesting Case Conference, 4th Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Jackson County Medical Society, 3rd Thursday, 7:00 p.m., Newport Country Club, Newport
Kennett CME Conference, 3rd Monday, 12:00 noon, Twin Rivers Hospital Cafeteria, Kennett, MO
Methodist Hospital of Jonesboro Cardiology Conference, every other month, 7:00 p.m., alternating between Methodist Hospital Conference Room and St. Bernard's, Stroud Hall. Meal provided.
Methodist Hospital of Jonesboro CME Conference, 2nd Tuesday, 7:00 p.m., Cafeteria, Methodist Hospital of Jonesboro
Neuroscience Conference, 3rd Monday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch Provided.
Orthopedic Case Conferences, every other month beginning in January, 7:30 a.m., Northeast Arkansas Rehabilitation Hospital
Perinatal Conference, 2nd Wednesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Piggott CME Conference, 3rd Thursday, 6:00 p.m., Piggott Hospital. Meal provided.
Pocahontas CME Conference, 3rd Wednesday, 12:00 noon & 7:30 p.m., Randolph County Medical Center Boardroom
Tumor Conference, Thursdays, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Walnut Ridge CME Conference, 3rd & last Tuesday, 12:00 noon, Lawrence Memorial Hospital Cafeteria
White River CME Conference, 3rd Thursday, 12:00 noon, White River Medical Center Hospital Boardroom

PINE BLUFF-AHEC

Behavioral Science Conference, 1st & 3rd Thursday, 12:00 noon, Jefferson Regional Medical Center
Chest Conference, 2nd & 4th Friday, 12:00 noon, Jefferson Regional Medical Center
FP Journal Club, 2nd Monday, 12:00 noon, Jefferson Regional Medical Center
Internal Medicine Conference, 2nd & 4th Thursdays, 12:00 noon, Jefferson Regional Medical Center
Obstetrics/Gynecology Conference, 2nd Tuesday, 12:00 noon, Jefferson Regional Medical Center
Orthopedic Case Conference, 2nd & 4th Wednesdays, 12:00 noon, Jefferson Regional Medical Center.
Pediatric Conference, 3rd Wednesday, 12:00 noon, Jefferson Regional Medical Center
Radiology Conference, 3rd Tuesday, 12:00 noon, Jefferson Regional Medical Center
Southeast Arkansas Medical Lecture Series, 4th Tuesday, 6:30 p.m., Locations vary. Dinner meeting.
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Residency Noon Conference, Monday, Wednesday, Thursday, Friday each week, alternates between St. Michael Health Care Center & Wadley Regional Medical Center
Tumor Board, Fridays, except 5th Friday, 12:00 noon, Wadley Regional Medical Center & St. Michael Hospital
Tumor Conference, every 5th Friday, 12:00 noon alternates between Wadley Regional Medical Center & St. Michael Hospital

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Volume 95 Number 4

September 1998

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and Senior Medical Student Missy Clifton
Story begins on page 145

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*Award-Winning Journal of the Arkansas Medical Society
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Cover photo was taken by A.C. Haralson of the Arkansas Department of Parks & Tourism.

Medicine in the News

Health Care Access Foundation

As of August 1, 1998, the Arkansas Health Care Access Foundation has provided free medical service to 14,303 medically indigent persons, received 27,181 applications and enrolled 53,169 persons. This program has 1,927 volunteer health care professionals including medical doctors, dentists, hospitals, home health agencies and pharmacists. These providers have rendered free treatment in 69 of the 75 counties.

Syphilis Rates Lowest in 50 Years

After tracking an alarming rise in primary and secondary syphilis in the U.S. during the late 1980s, the CDC now reports that the disease seems to be under control. The 1997 rates are the lowest since syphilis reporting began in 1941.

From 1990 to 1997, rates of primary and secondary syphilis fell 84% in the country overall. Regional declines ranged from 95% in the Northeast to 80% in the South and 73% in the Midwest; occurrences are now focally epidemic in nature rather than endemic. Disease rates also decreased 80% to 90% in all ethnic groups. Despite these declines, however, primary and secondary syphilis remain many times more common in southern states than elsewhere in the country. Rates per 100,000 population also remain substantially higher among blacks (22 cases) than among Hispanics (1.6) and whites (0.5).

Comment: Epidemiologists worry that a reporting bias may be responsible for some of the persistent patterns in syphilis rates; the disease may be sought and reported more intensively in minority patients than in others, particularly in public STD clinics in the South. Still, disease rates appear to be responding to both syphilis-control programs and the HIV-prevention efforts of the last 10 years. -A Zuger

Primary and secondary syphilis - United States, 1997. MMWR 1998 Jun 26; 47:493-7.

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AMA-Sunbeam Suit Settled

The AMA's long national nightmare is over. So declared AMA officials when they announced last month that they had disentangled themselves from Sunbeam Corp. by paying the appliance manufacturing firm \$9.9 million.

The money, which has already been paid, settles a lawsuit Sunbeam filed in September 1997, when the AMA announced it would not honor a controversial

endorsement agreement that was expected to earn both parties millions. The contract called for the placement of the AMA seal on Sunbeam's line of "Health at Home" products -- which included heating pads and humidifiers -- in an exclusive royalty arrangement.

"The settlement with Sunbeam acknowledges our responsibility in this dispute," said Randolph D. Smoak Jr., M.D., chair of the AMA's Board of Trustees, in a prepared statement. "The cost of the settlement was taken from Association reserves and thus will not affect the AMA's ongoing operations or mission."

The payment covers \$2 million in out-of-pocket expenses, including Sunbeam's attorneys fees, and \$7.9 million in damages. In its lawsuit, Sunbeam initially sought at least \$20 million in damages but later revised its claim to seek an unspecified amount. Sources familiar with the litigation said they expected the company to ask for \$40 million to \$50 million at a trial scheduled to begin in November.

If the AMA had been found liable, it would have been obligated to pay all damages Sunbeam could prove, as well as attorneys' fees.

Both parties wanted out - While discovery in the lawsuit had not reached the stage where Sunbeam had established its damages, both sides appeared anxious to settle. A trial would have cost the AMA legal fees and bad publicity and would have proved a distraction to Sunbeam, which is confronting a host of its own legal problems, including possibly misstated financial results and, at last count, 17 related shareholder lawsuits.

A \$10 million payment won't do a great deal to their bottom line, but it "gives them closure on one issue," said Jeff Middleswart, a Dallas-based financial analyst. The company itself has refused to comment on the settlement.

The AMA has paid at least \$13.4 million in Sunbeam-related charges since the controversy began last August. In addition to the settlement, \$3.5 million in legal fees had been reported as of June. On top of that, severance packages paid to high-ranking executives who quit or were fired in the wake of the controversy have added perhaps millions more to the cost, although AMA officials cited confidentiality agreements with the severed executives in refusing to disclose the details of those settlements.

AMA officials have said they will seek to recover a portion of the funds through the Association's directors and officers liability insurance. How much of the \$9.9 million settlement the AMA can recover has not yet been determined. Experts said the AMA's legal expenses would have grown rapidly once a trial got

under way. And a trial would have been hard to win.

"This is such a clear case of liability, or breach of contract," said Eric Posner, a professor of law at the University of Chicago.

"*You have to do what you have to do*" - News of the settlement has drawn mixed reaction. Many members expressed relief that the dispute was finally put to rest and accepted the price of ending it.

"You have to do what you have to do," said Mark Levine, M.D., an internist from Colorado who chaired the seven-member ad hoc committee of the AMA's House of Delegates that studied the Sunbeam affair. "It was clear that the AMA as an organization had some culpability in this. They weren't going to be able to walk away free, nor should they have."

Sandra Steinbach, M.D., a Dallas psychiatrist who threatened to cancel her AMA membership when the licensing agreement with Sunbeam was first announced, was forgiving. "They are trying to recover from this horrible mistake," she said.

But other members were less sympathetic. A West Coast delegate who asked to remain anonymous said he expects heads to roll after a settlement this large.

"In any other organization of this size and net worth, there would be a change in leadership. I don't mean our new EVP, I mean the chairman of the board. Whether he was guilty or not guilty, I think he would be out," he said.

Those who were frustrated by the response of board members to the crisis said they had been looking forward to an accounting of the board's role at the November trial.

"If we went to litigation, and we gave depositions, and we had testimony we would find out whether the board or some members of the board actually knew about it," said Raymond Scalettar, M.D., who challenged Thomas Reardon, M.D., chair of the Board of Trustees at the time, in June's contest for president-elect. An independent review by outside legal counsel and the committee headed by Dr. Levine both concluded that board members were unaware of the details of the Sunbeam deal before it was made public.

Others said going to trial wasn't worth the price. "We may have learned more about the ill-doings, but I don't think it would have been worth the bad publicity for the AMA," said John E. Schowalter, M.D., a New Haven, Conn., psychiatrist. "It has been a sad and tawdry time for the AMA. I think the public needs to see the AMA as backing quality of care and not looking out for itself."

Information provided by AMA News Release dated August 11, 1998.

Primary Care Physicians May Miss Important Patient Information

Primary care doctors could do a better job of taking medical histories and improve their preventive screening skills, concludes a study supported by the Agency for Health Care Policy and Research. Primary care physicians in this study often missed important information about a patient's related symptoms and medical history in one visit. Such omissions could adversely affect decisions about diagnostic tests and treatment plans, says Paul G. Ramsey, M.D., of the University of Washington.

Dr. Ramsey and his colleagues analyzed the history-taking and preventive screening skills of 134 primary care physicians from five Northwestern States. The researchers presented the physicians with standardized patient cases (individuals who have been trained to present a certain medical profile to the doctor) and scored them on the number of essential history and preventive screening items performed during that encounter.

About 75% of physicians asked questions that described presenting symptoms, and 83% of internists and 71% of family practitioners asked about medications and allergies to medication. However, only half of internists and family practitioners asked pertinent history questions related to the patient's current complaint (51% and 46%, respectively) or reviewed physical symptoms or past medical history (47% and 41%). For instance, 56% of physicians did not ask a 60-year-old man with fatigue and weight loss related to undiagnosed lymphoma whether he had night sweats, which would increase suspicion of lymphoma.

Physicians' performance in preventive screening and counseling skills also suggested opportunities for improvement. Physicians asked 74% of standardized patients about smoking and 60% about alcohol use, but they asked only 41% about recreational drugs. Few physicians asked about patients' sexual histories or risk factors for AIDS and other sexually transmitted diseases. The researchers suggest that physicians consider using medical intake questionnaires which could enhance medical history taking, particularly since many primary care physicians now must see more patients in less time.

For more information, see "History-taking and preventive medicine skills among primary care physicians: An assessment using standardized patients," by Dr. Ramsey, J. Randall Curtis, M.D., M.P.H., Douglas S. Paauw, M.D., and others, in the February 1998 American Journal of Medicine 104, pp. 152-158.

Information provided by the Agency for Health Care Policy and Research Newsletter titled Research Activities, Number 217, July 1998 issue.

AMS Newsmakers

Dr. Robert W. Arrington, a professor of pediatrics and director of the Division of Neonatology in the Department of Pediatrics at UAMS, was recently named recipient of the 1998 Distinguished Alumnus Award by the Arkansas Caduceus Club for his on-going contributions to the medical community.

Dr. Matthew Callaway, an El Dorado family practitioner, was recently elected to the SHARE Foundation Board of Directors.

Dr. Cole Goodman, a Fort Smith plastic surgeon, was recently elected President of the Southeastern Society of Plastic and Reconstructive Surgeons. He will

serve as president-elect from 1998-1999 and complete his term as President from 1999 through the year 2000.

Dr. David M. Johnson, a Searcy physician of internal medicine, was recently voted *Physician of the Year* by the Home Care Association of Arkansas for achievements during his 29-year career.

Send your accomplishments and photo for consideration in *AMS Newsmakers* to:

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The AMS Membership Directory

A quick and easy guide to AMS physician members, the directory provides addresses, phone and fax numbers, specialties and E-mail addresses. Plus other health related information. The directories are printed each year in late July.

The directories are \$50 each. With a purchase of 2 to 10, \$45 each; 11 or more, \$35 each. (Note: All AMS members receive one free directory through the mail immediately after publication in August of each year.)

The AMS's Physician's Legal Guide

A compilation of state and federal laws affecting the practice of medicine in Arkansas, this guide is 170 pages on topics such as medical records, patient abandonment, medical board regulations, Antitrust Law, Workers' Compensation, & much more. The List Price is \$100.00. **AMS Member Price is \$70.00.**

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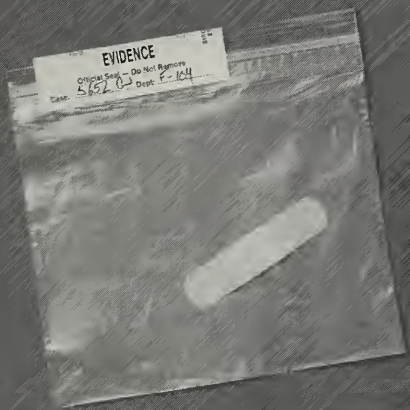


Exhibit A:

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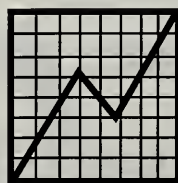
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Class of 2002 White Coat Ceremony

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August 5, 1998

The Class of 2002 White Coat Ceremony featured several speakers including AMS President, Dr. Michael N. Moody; Co-President of the UAMS College of Medicine Honor Council, Ms. Missy Clifton; and Keynote Address Speaker, Dr. James Y. Suen, Professor and Chairman of the UAMS Department of Otolaryngology. Their speeches are presented on the following pages.

The following photos were taken during the ceremony by John Paul Jones of the UAMS Graphics Department.



Medical Students receive their oaths and white coats while Dr. Moody and Dr. Suen assist.



Medical Students recite and sign the medical student oath.

*The 1998 White Coat Ceremony was sponsored by:
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The Science, Business and Art of Medicine

UAMS White Coat Ceremony Address

Michael N. Moody, M.D.*

Dean Wilson, faculty, parents, families - thank you for the opportunity to participate in this wonderful event. To the students, and from a member of the class of 1972, it is a distinct pleasure and honor for me to welcome you to the class of 2002.

On behalf of the Arkansas Medical Society, I bring you congratulations for choosing to enter what many consider the world's most respected profession. The future of our profession is yours to determine. I was invited here tonight to discuss the ethics and professionalism of medicine. We should think of medicine in three parts: the Science of Medicine, the Business of Medicine, and the Art of Medicine.

As we think of the Science of Medicine, your first challenge is to absorb the vast amount of knowledge already in our basic sciences. However, as we move from this millennium into the next, the greater challenge will be to remain current with future advances. In the provision of competent and appropriate patient care, the physician must continue to study, apply, and advance their scientific knowledge throughout their career. An example of that challenge is the unraveling of the human genome which will open new horizons in genetic and reproductive engineering. This will create dramatic, and often divisive ethical debate and decisions. As quality improvement expert Peter Drucker

once said, "...We are entering a period of turbulence, a period of rapid innovation... but a time of turbulence is also one of great opportunity for those who can understand, accept, and exploit the new realities. It is, above all, a time of opportunity for leadership." **YOU ARE** that leadership for the science of medicine.

The Business of Medicine was not discussed when I was in school; but, managed care has developed new terms like HMO, economic credentialing, and physician disenrollment from provider networks. This has created conflicting incentives for physicians who work for managed care organizations but advocate for their patients. We must let nothing compromise patient-physician communication. Perhaps our most important job is to preserve and revitalize the sanctity of the patient-physician relationship. Our patients will be our most dedicated allies - but only if we are their most vocal advocates.

The Art of Medicine - As in many forms of art, it is difficult to define. Many patients refer to it as "bedside manner" whether at the bedside or in the physician's office. It is competent medical service with compassion and respect for human dignity. It is your ability to communicate that compassion and respect, not only with words, but with body language as well. Continual advances in medical technology will cause us to struggle more and more with conflicts between prolonging life versus preserving the quality of life. We must always keep the wishes and values of the

* Dr. Moody, 1998-1999 Arkansas Medical Society President, is a family practitioner of Salem and Medical Director of the Arkansas Foundation for Medical Care.

patient in mind as we make those difficult decisions.

And, so, as we consider the science, the business, and the art of medicine, I challenge us to demand high standards of professionalism and ethics that clearly put our patients' well-being before our own. I challenge us to advocate for our patients even when the system - especially when the system - would make that difficult and also challenge the system to more adequately meet the needs of all patients.

There is a road map to meet these challenges - it's called the American Medical Association Principles of Medical Ethics. I would like to present each new student with a copy of these principles and urge you to carry this code with you as you continue your career.

Let me close with a couple of quotes and a word of advice...

During her recent visit to Arkansas, AMA President - Dr. Nancy Dickey, quoted from the book *The Loyal Physician*, whose author asked, "What do we revere? What do we hold dear? For what did we enter this profession? And how long has it been since we reaffirmed our commitments and our visions?" While this quote was directed toward practicing physicians, it is also appropriate for you to think... What do YOU revere? What do YOU hold dear? For what did YOU enter this profession?

Each of you should seek a mentor from our profession who shares your commitments and your visions so that they may be frequently reaffirmed.

One of my mentors has been Dr. Jim Weber, a central Arkansas family physician who is a past-president of the Arkansas Academy of Family Physicians and of the Arkansas Medical Society. It has been my great honor to succeed him in both of those offices. But, it was when he took office as President of the American Academy of Family Practice that he offered this advice which I paraphrase... *Although we are*

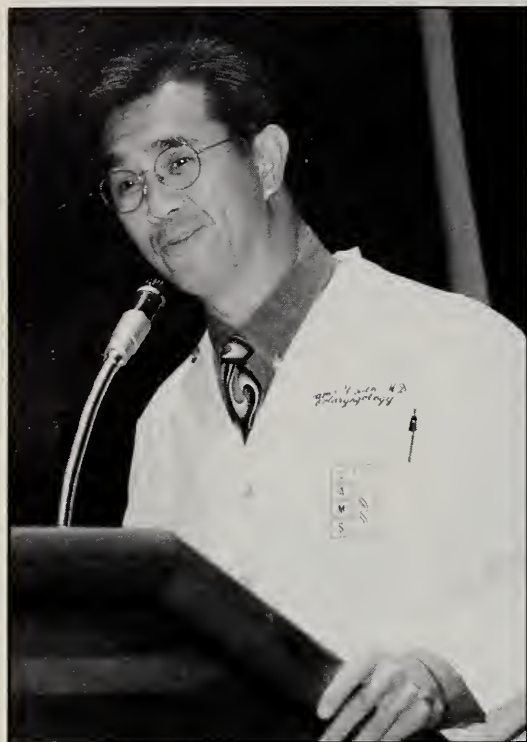
American Medical Association Principles of Medical Ethics

Preamble: The medical profession has long subscribed to a body of ethical statements developed primarily for the benefit of the patient. As a member of this profession, a physician must recognize responsibility not only to patients, but also to society, to other health professionals, and to self. The following principles adopted by the American Medical Association are not laws, but standards of conduct which define the essentials of honorable behavior for the physician.

- I. A physician shall be dedicated to providing competent medical service with compassion and respect for human dignity.
- II. A physician shall deal honestly with patients and colleagues, and strive to expose those physicians deficient in character or competence, or who engage in fraud or deception.
- III. A physician shall respect the law and also recognize a responsibility to seek changes in those requirements which are contrary to the best interests of the patient.
- IV. A physician shall respect the rights of patients, of colleagues, and of other health professionals, and shall safeguard patient confidences within the constraints of the law.
- V. A physician shall continue to study, apply and advance scientific knowledge, make relevant information available to patients, colleagues, and the public, obtain consultation, and use the talents of other health professionals when indicated.
- VI. A physician shall, in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve, with whom to associate, and the environment in which to provide medical services.
- VII. A physician shall recognize a responsibility to participate in activities contributing to an improved community.

Arkansas Medical Society members agree to abide by the Principles of Medical Ethics as espoused by the American Medical Association.

facing many challenges concerning managed care, public policy, and the scope of a physician's practice - I must say that after being in practice more than twenty-five years, the future of medicine looks better than ever before. So, take time to work, it is the price of success. Take time to play, it is the source of power. Take time to read, it is the way to knowledge. Take time to be friendly, it is the road to happiness. Take time to laugh, it is the music of the soul. Take time to love and to be loved. I wish you all the very best of good fortune. And, remember, the future respect for our profession is in your hands.



The Golden Rule

UAMS White Coat Ceremony

Keynote Address

James Y. Suen, M.D.*

Thirty-six years ago, I was getting ready to start medical school here at UAMS. That was before most of you students were born. Back then our white coat ceremony was a little different from this one. Our white coat ceremony was at the end of the 4 years and was held on the campus where we had a bonfire and everyone threw their white coats into the fire to celebrate. That was a memorable event!!! I like the present white coat ceremony such as tonight's because it gives some meaning to your white coat as you start this exciting and challenging 4 years of your life.

I was surprised several months ago to receive a letter from Dr. Jay Menna and Dean Wilson asking if I would deliver the keynote address at the White Coat Ceremony for this year's freshmen students. This was a surprise and an honor for me. In 25 years, I literally have given hundreds of lectures throughout the world, but they were essentially all scientific talks. This is the first talk I have ever been asked to give on ethical and professional behavior. This was a challenge and one which I hope will be successful.

Proper ethical and professional behavior is one of the most important things you will learn in medical school. It can keep you from getting sued; It can win you respect from your peers, colleagues, and patients; It can give you self satisfaction or gratification, plus it is the right thing to do.

One week ago one of my patients died of cancer. She was younger than I am. I had been treating her for over 2 years. The cancer was relentless in spite of optimal treatment. We tried many treatments, even the latest treatment, Gene Therapy. The cancer eventually spread and affected her lungs mostly. For the past several months, she had severe pain and she struggled to breathe. She was in the hospital for the last 5 weeks of her life. The day before she went into a coma, I was talking to her and her sister about dying, and that I felt it was only a matter of a few days. They both told me how much they appreciated my care for her and that I was the best doctor they had ever met—I was humbled by what they said, especially coming from a dying patient. They told me something else which I had not heard before and I didn't know how to respond. They said that over the past 2 years everytime I would come to see her, whether in the clinic or the hospital, that there was a "Presence" about me and that it was difficult to explain but it was always there, and that it had a calming effect on her and the family even though they knew I was about to tell them the cancer had recurred or had spread. My patient died 3 days later.

I have thought a lot about what they said, and I think I know what they meant. They could sense that I cared about her and that I would do everything humanly possible to stop her cancer and to take care of her. That "caring attitude" was sincere and it was con-

* Dr. Suen is Professor and Chairman of the UAMS Department of Otolaryngology Head and Neck Surgery.

veyed to the patient and her family. What they shared with me was the greatest compliment they could have paid me and it made all my years of training and taking care of patients worth while.

In preparing for this speech, I spent many hours thinking about what I could say to you on ethical and professional behavior. I am told that I have a good bedside manner. I have tried to figure out this perception. I would like to share some of the things I do when I see a patient, whether for the first or one-hundredth time. Hopefully they will help you.

1. I always greet them with a hello and a warm smile.
2. I use Mr. or Mrs. as a rule.
3. I always shake hands with a firm handshake with the patient and their family (touch is very important). Patients feel your presence more when you have touched them, such as, a handshake or hand on their shoulder.
4. I always apologize if I'm late.
5. I introduce others of our team to the patient and their family.
6. I get a Hx and PE. Listening is the key. The patient frequently knows what is wrong with them and will tell you clues if you are listening.
7. I never belittle their complaints.
8. If I don't know what their problem is, I tell them I will try my best to figure it out and explain how I plan to do so.
9. Always be truthful with a patient, but be careful how you say it.
10. I always ask the patient and their family if they have any further questions before I leave their room.

My primary area of specialty is cancer of the head and neck. I have spent half of my life treating this problem—I have had many patients die of this cancer. The ones that die usually go through a lot of pain and suffering, as it is with many other cancers. The treatment frequently is as vicious as the disease. Over the years, I have learned a great deal from my experience taking care of sick and dying patients. 1) It has humbled me—because I feel a sense of failure when the cancer recurs and the patient dies; 2) It has made me appreciate life more—because I have seen how important good health is; 3) It has made me more compassionate, because I may be in their shoes some day; and 4) It has enriched my life, because I have a better understanding of people, of their fears and their courage.

I would like to ask: How many of you came to medical school because you wanted to get rich? How many of you came to medical school because of parental pressures? How many of you came to medical school because you wanted to take care of patients, to heal the sick, to save a life? I would hope that all of you fit in this last category.

In the next 4 years, you will be spending many

hours learning thousands of facts and how to think rationally. You will spend very few hours on ethical and professional behavior. You really don't need to study a lot about ethical and professional behavior if you believe in and follow the Golden Rule, i.e., *"Do unto others, as you would have them do unto you."*

You would want to be treated with respect, with compassion, with concern, and with love. I follow the Golden Rule, and it has served me well.

For the next 4 years, you will be medical students. Then, for the rest of your professional life, I would hope that you will then become Students of Medicine.

I'd like to close by quoting a simple quotation from John Wesley. *"Do all the good you can, By all the means you can, In all the ways you can, In all the places you can, At all the times you can, To all the people you can, As long as ever you can."*

Remember to use the Golden Rule as your guide for Ethical and Professional behavior. Thank you.

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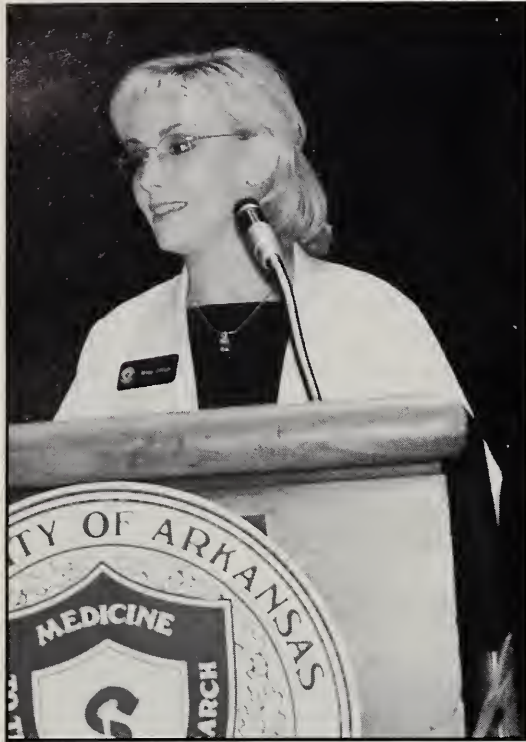
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The Importance of Ethics in Medical School

UAMS White Coat Ceremony Address

Missy Clifton*

Good evening, my name is Missy Clifton. I am a fourth year medical student and one of the co-presidents of the Honor Council. I am honored to be speaking to you tonight, and I would like to thank Dean Menna for this opportunity. I would like to begin by congratulating all of you. I know that you have worked very hard to get to this point in your career. I hope that some of the things you hear tonight will help you as you face the hard work and emotional ups and downs involved in becoming a physician.

When I was first elected to the honor council in 1995, the academic deans of the college of medicine and the council as a whole felt that it was important to initiate you into the medical profession. The idea for tonight's ceremony involving the recitation and signing of the honor code and the conferral of your white coats was decided upon for this initiation. We also felt that it was important at this time to stress to you the ideals that we feel are essential to our profession. So tonight, I will try to give you a fellow student's perspective on why ethical behavior, in all aspects of life, but especially in the medical profession, is so important.

I want to say to you first, that putting on that white coat is going to forever change you and your life. Being accepted to medical school is an honor, but at the same time it is a huge responsibility. For the first time in your lives you will be asked to learn, and I do mean learn, not just memorize, tremendous amounts of information. It would be easy to just memo-

rize questions in the test books or to take a quick glance at your neighbor's test to get you through a difficult exam. But, I challenge you to really learn the information being presented to you in these next two years. Even what seems to be trivial minutia you will invariably be asked about by Dr. Andreoli, chairman of the department of internal medicine, as a junior in front of all your peers. But, more importantly, some day one of your patients may have that rare disorder and look to you, the wise all knowing doctor, to take care of them.

Secondly, medical school is competitive. Everyone sitting in your class is very intelligent and likely most of you are accustomed to being at the very top of the class. Medical school will separate you and unfortunately put you in a position to be in direct competition with each other. I would like to encourage you to look at the people in your class as colleagues not competitors. Seek to build strong friendships and study groups to learn from each other. Strive to build one another up and encourage each other because these next years will be filled with the highest highs and the lowest lows you have ever experienced. The relationships you build with your peers will either help you or hurt you both in medical school and in your career. Strive to be thought of as a person of character and remember that our deeds determine us as much as we determine our deeds.

Finally, I would like to encourage you to never lose sight of why you came to medical school. I would be willing to bet that none of you said on your application that you are coming to med school to make the

* Ms. Clifton is Co-President of the UAMS College of Medicine Honor Council.

big bucks. I imagine that most of you are here because you believe it is important in this life to do something to help others. This is a lofty and worthy goal. Remember it after you have had several tests in a row and very little time for yourself and even less for recreation. Remember it when your friends from college are getting off at five and actually making money. Remember it when you have been awake for thirty hours, writing notes, and going to surgery after surgery to only get to hold a retractor. Remember it because it will all be worth it when you bring the young couple's first baby safely into the world, and when your sickest patient gets better because you knew how to treat them, and when you hear those grateful words, "Thank you doctor." You will realize that your greatest reward for all your hard work is not what you have gotten from it monetarily but rather what you have become by it.

In closing, I would like to share with you one of my favorite quotes which says, "What lies behind us and what lies before us are tiny matters compared to what lies within us." Hold on to the excitement you have now and use it to help you become better people, people with a thorough knowledge of disease processes and medical treatment, people with compassion for your patients and a desire to heal them not just treat them, people worthy of the title "Doctor." Good luck. ■

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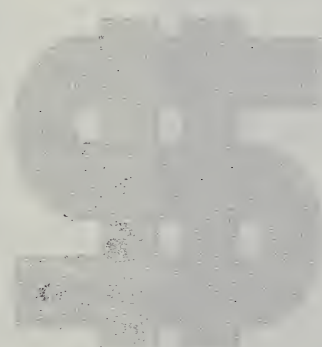
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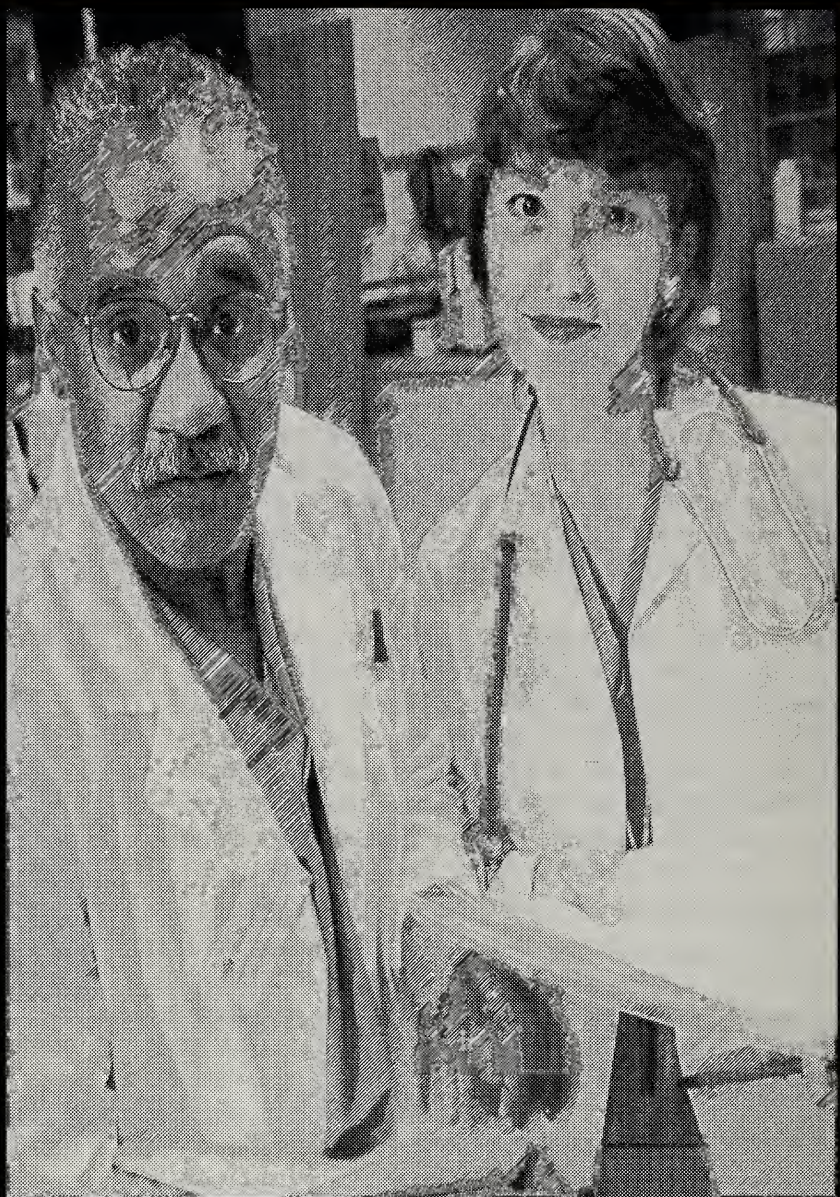
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Bilateral Sciatic Nerve Entrapment Due to Weight Loss

Remington Lee, D.O.*

Alice V. Fann, M.D.**

Kerstin Sobus, M.D.***

Bilateral foot drop due to a non-traumatic injury to both sciatic nerves is rare. In view of this, we present a case of a child who developed bilateral sciatic nerve dysfunction during the course of a life-threatening illness. The cause of this problem was presumed to be entrapment of the sciatic nerves between the pelvic bones and the bed. This case underscores the importance of frequently repositioning comatose or immobile patients who are bedridden. Also, other causes of sciatic nerve injury are reviewed.

Introduction

Bilateral foot drop due to a non-traumatic injury is rare. Non-traumatic injury to both sciatic nerves is even rarer. In view of this, we present a case of a child who developed bilateral sciatic nerve dysfunction during the course of a life-threatening illness. The cause of this problem was presumed to be injury to both of the sciatic nerves due to their entrapment between the pelvic bones and the bed.

Case Description

An 11-year-old black male was in good health until five days prior to his admission to a local hospital. He had been evaluated by his local physician for fever and was diagnosed as having an upper respiratory tract infection for which an antibiotic and non-steroidal anti-inflammatory medications were prescribed. His symptoms improved by the next day. By day three, however, he became acutely ill and was taken to the Emergency Department. At the time of presentation,

he was febrile and had elevated liver function tests. His condition deteriorated rapidly. Because of presumed overwhelming sepsis, the patient was transferred to a tertiary care center.

Past medical, surgical and family histories were non-contributory. His childhood immunizations were up-to-date.

On admission, the patient was lethargic, but combative when aroused. Admission weight was thirty kilograms. Physical examination revealed a small ulcer on the buccal mucosa, bleeding gum line, submandibular lymph nodes, tachycardia, petechiae on the right shoulder and arm, and a right inguinal lymph node measuring 0.25 by two centimeters. Routine laboratory studies were obtained and were as follows: sodium 133 mmol/L; potassium 4.3 mmol/L; calcium 7.3 mg/dL; alkaline phosphate 259 U/L; AST 2088 mU/L; ALT 452 U/L; PT 18.7 seconds; PTT 99.5 seconds. Urinalysis was within normal limits. Radiological tests included a CT scan of the brain, reported as normal, and a chest radiograph, notable for a significant increase in vasculature.

Because of advancing respiratory failure and hemodynamic instability, the patient was intubated and transferred to the Intensive Care Unit (ICU). Blood tests for viral, bacterial and parasitic infections, including tularemia, Rocky Mountain Spotted Fever, leptospirosis, hepatitis and HIV were negative. Epstein Barr virus titers were indicative only of a past infection. A lumbar puncture was attempted but not performed because of the patient's unstable vital signs in a side-lying position. Because of a presumed diagnosis of sepsis, he was started on broad-spectrum antibiotics. While in the ICU the patient developed disseminated intravascular coagulation for which he required multiple units of fresh frozen plasma; a transient pancytopenia which resolved spontaneously; and renal

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failure which required two months of dialysis. Mechanical ventilation was required for five weeks. On neurological examination, the patient had limited awareness and reduced response to his environment for the initial five weeks of hospitalization.

During his acute illness, the patient was initially supported with total parenteral nutrition, followed by nutritional supplements via nasogastric tube. Despite this, the patient experienced a weight loss of 4.5 kilograms over the first six weeks of hospitalization. In order to prevent contractures while in the ICU, he received physical and occupational therapy for range of motion exercise. Approximately seven weeks after admission, the patient was stable medically and transferred to the Rehabilitation unit. On transfer, he was noted to be in a deconditioned state with generalized weakness and poor endurance. He was unable to ambulate or to perform activities needed for self-care such as dressing or bathing. His recovery, though gradual, was excellent. On regaining sufficient strength to allow independent ambulation, he was noted to have a bilateral steppage gait. Both patellar deep tendon reflexes were normal at that time, but Achilles reflexes were bilaterally absent. On manual muscle testing, hip and knee flexion and extension were 3+/5, and dorsiflexion, plantar flexion and ankle eversion were 1+/5. Electrodiagnostic testing (EMG/NCS) for possible bilateral peroneal nerve injury was limited due to the patient's age and reduced tolerance of the exam. The impression from the EMG/NCS data and from the clinical examination was an axonotmesis injury to both sciatic nerves between the inferior gluteal nerve and the ischial tuberosity. There was evidence of reinnervation of all of the sampled muscles innervated by the sciatic nerve. Review of the patient's history and medical records revealed no traumatic cause for the injury to his sciatic nerves.

Discussion

Because of the anatomic position of the sciatic nerve, non-traumatic injury sufficient to cause foot drop is uncommon.¹ The sciatic nerve is essentially a combination of the tibial and common peroneal nerves and is the principal nerve to the posterior thigh, leg and foot. It exits the pelvis through the inferior aspect of the greater sciatic foramen, inferior to the piriformis muscle and inferiolaterally to the gluteus maximus muscle. It runs midway between the greater trochanter of the femur and the ischial tuberosity, contacting bone at a point one third up an imaginary line from the ischial tuberosity to the posterior superior iliac spine. It then passes vertically over the obturator internus, quadratus femoris and adductor magnus muscles.² It subsequently may divide within the gluteal region, though it usually divides into the tibial and common peroneal nerves as it enters the apex of the popliteal

fossa. The tibial nerve is mainly responsible for hip extension (through hamstring muscles), knee flexion, plantar flexion and flexion at the toes. The common peroneal nerve is often palpable where it divides into its deep and superficial branches at the fibular head. The deep peroneal nerve supplies muscles for dorsiflexion, ankle inversion and toe extension whereas the superficial peroneal nerve causes eversion of the ankle² and contributes to plantar flexion. The common peroneal nerve is the most commonly injured nerve of the lower extremity because of its superficial location at the fibular head³ and its more firm fixation around the sciatic notch.⁴

A suspected sciatic nerve injury must be differentiated from intervertebral disc injury herniation between L4-5 and L5-S1, injury to the cauda equina, lumbosacral spinal stenosis and injury to the lumbosacral plexus. The etiologies of sciatic nerve injury include injury from medical procedures, trauma and internal or external compression. Injury from medical procedures include the following: femur fracture repair and total hip arthroplasty from the applied traction force;^{5,9} injections into the buttocks;^{5,7,9,10} radiation therapy to pelvic region;⁵ and cardiac surgery from femoral artery thromboembolism or intra-aortic balloon pump due to decrease flow through femoral artery.¹¹ Trauma may predispose the sciatic nerve to injury from a pelvic fracture due to direct trauma or expanding intrapelvic hematoma;¹² a proximal femur fracture;^{5,7,8,9} a posterior dislocation of the femoral head;⁷⁻⁹ and penetrating muscle wounds such as gunshot wounds to thigh or buttocks.^{5,9} Internal compression of the sciatic nerve may occur in a psoas or pelvic abscess; entrapment by the piriformis muscle;¹³ heterotopic ossification of the biceps femoris;¹⁴ direct spread from pelvic neoplasm;¹⁵ or pressure from gravid uterus.¹⁵ It may also be injured due to ischemia from an aneurysm or thrombosis of the iliac vessels;⁹ or sciatic nerve infarction or vaculitis.^{5,9} It may be injured by external compression from sitting or laying on a hard surface for prolonged periods^{1,7,5,16} during surgery⁹ or while in a coma^{7,9} or compressed between the greater trochanter and the ischial tuberosity during prolonged squatting.⁵

In this case, the EMG/NCS test and clinical examination indicated the most likely point of injury to the sciatic nerve was between the inferior gluteal nerve and the branch to the hamstring muscles. No evidence of injury to his sciatic nerves could be found. Because of his medical condition, he was maintained on bed rest and allowed to sit in a recliner only as his condition improved. We believe this patient sustained a compression injury, resulting in axonotmesis of his sciatic nerve secondary to prolonged bed rest, weight loss, and thin body habitus. His weight loss effectively decreased his tissue mass and thus decreased its normal capacity to distribute pressure, especially around the

buttocks. Having less "cushion" the sciatic nerve was exposed to external compression at the ischial tuberosity.

Conclusion

This case underscores the importance of frequently repositioning comatose or immobile patients who are bedridden. Moreover, without adequate pressure relief, prolonged sitting or lying in one position can lead to unilateral or bilateral sciatic nerve injury that results in paresis to the lower-extremities.

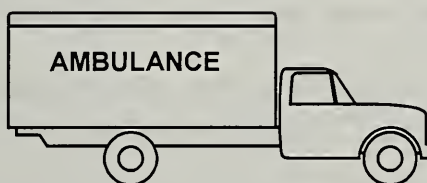
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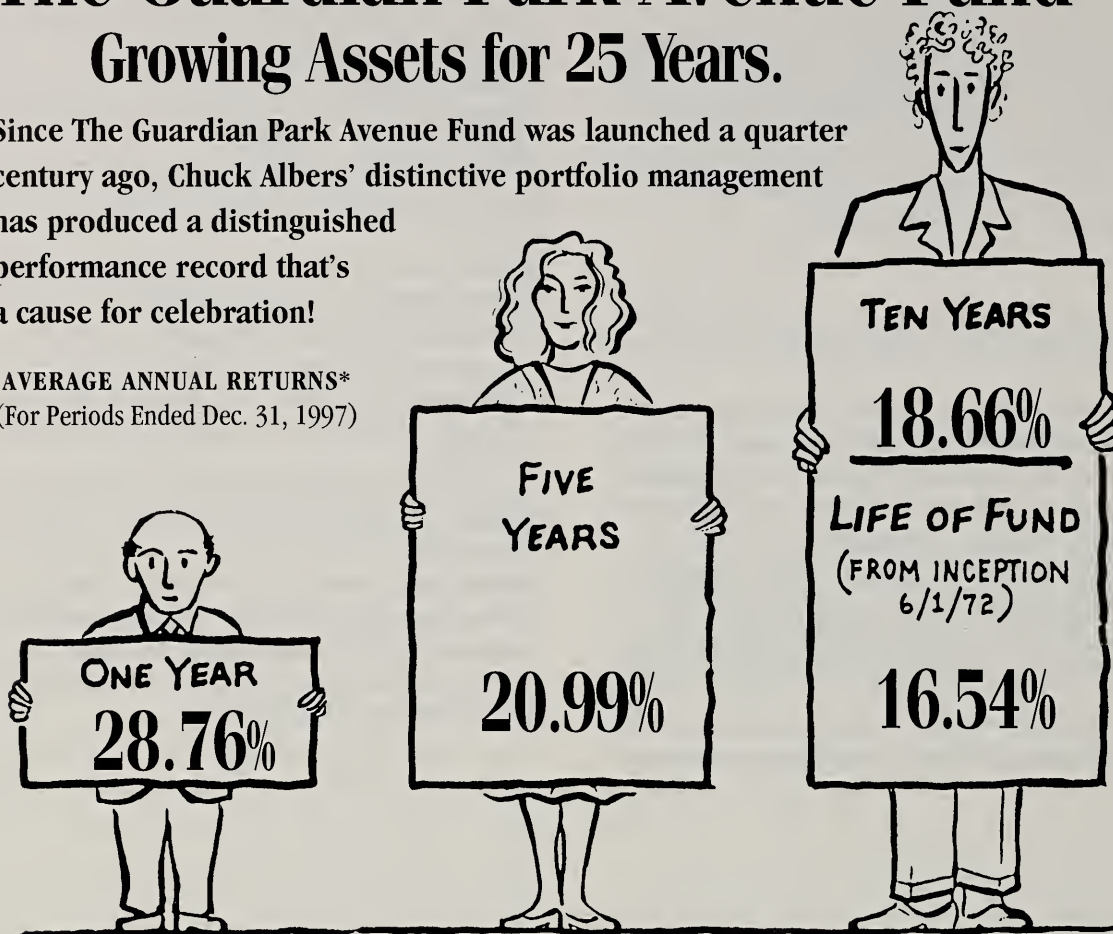
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Massive Hemothorax After Low Impact Blunt Chest Trauma: *a case report*

Jerel L. Raney, M.D.*

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Introduction

Blunt chest trauma can result in multiple injuries. Regarding the heart and great vessels, one can see cardiac contusion, cardiac rupture, pericardial tamponade, and aortic disruption. In the lungs and chest wall, pulmonary contusion, pneumothorax, hemothorax, chylothorax, and rib fractures are all possible sequelae. The mechanism of injury is typically a high speed motor vehicle accident. However significant morbidity can occur from low speed motor vehicle accidents and falls, especially in the elderly and those with underlying skeletal disease. The following is a case report of a 76-year-old male patient who presented to the emergency department with the complaint of shortness of breath 3 weeks after a fall from a stepladder (approximately 2-3 feet). He was found to have a massive hemothorax.

Case Report

Mr. L. is a 76-year-old gentleman who presented to the emergency department with the chief complaint of having a "cold," with mild symptoms of shortness of breath and left sided chest discomfort. His daughter who accompanied him was also concerned that he had been "acting different" and had been confused. He denied fever, nausea, and productive cough. His past medical history was significant for a fall from a stepladder while picking peaches 3 weeks previously. He was seen at a local physician's office and prescribed naproxyn sodium and propoxyphene. A chest x-ray was not obtained at that time. He initially improved, but continued to have a dull ache in his left chest. His daughter stated that his episodes of confusion began after his fall and she mainly characterized them as

periods of disorientation. Also significant in his past medical history was a gunshot wound to the left chest suffered in World War II. He was not certain whether the gunshot wound had required surgical intervention. He was taking no medications other than the two mentioned above.

Physical examination revealed a well developed elderly man in no acute distress. Vital signs were as follows: Pulse-80; Respiratory Rate-16; Blood Pressure-151/76; Temperature-99.0. Breathing was unlabored and he was speaking in complete sentences. The head, ears, eyes, nose and throat exam was normal. The cardiac exam revealed normal 1st and 2nd heart sounds without a murmur. The right lung was clear to auscultation. The left chest was dull to percussion and only faint breath sounds were heard at the apex. Abdominal and extremity exams were normal. The chest wall was tender to palpation over the mid-axillary line over the sixth and seventh ribs.

A chest x-ray revealed nearly complete opacification of the left hemithorax, along with fractures of the sixth and seventh ribs.(Fig. 1). The left lateral decubitus film showed layering of the fluid (Fig. 2). No suture material or bullet remnants were seen on chest x-ray. A computed tomography (CT) scan revealed a fluid filled left hemithorax, with some loculated areas. Laboratory values were as follows: Hematocrit (HCT) 25% -(down from 41.4% two years previously); hemoglobin-8.5 mg/dl. Electrolytes and cardiac enzymes were within normal limits. An electrocardiogram was normal.

A surgery consultation was obtained. After placement of a thoracostomy tube, the patient was taken to the intensive care unit. Approximately 2 liters of fresh and clotted blood were evacuated from the chest overnight, and he was transfused with two units of packed red blood cells. After 3 days the chest tube was removed and he had an uneventful hospital stay. His confusion resolved without a definite cause being

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found. It was speculated that it may have been caused by the Darvocet, and exacerbated by the anemia and mild hypoxemia. A follow-up chest x-ray obtained one month later was normal, and the patient was doing well.

Discussion

Hemothorax is a common complication of blunt chest trauma. The bleeding usually arises from the lung parenchyma, small muscular arteries in the chest wall, or from the intercostal arteries. If the bleeding is brisk, the possibility of damage to major vessels exists.¹

Blood in the hemithorax can cause alterations in lung pathophysiology. If there is a large amount of blood, parenchymal compression with decreased ventilation may occur. Additionally, hypovolemia is a possibility. If inadequately treated or unrecognized, large clots can become fibrosed producing a fibrothorax, or an infection may develop resulting in an empyema.

The diagnosis of a hemothorax begins with the physical exam. It must be suspected in all blunt or penetrating chest trauma victims with a significant mechanism of injury. Exam may reveal decreased breath sounds on the affected side or dullness to percussion. The upright chest x-ray may not detect up to 300 milliliters of blood in the pleural space. A lateral decubitus film may be more sensitive. A supine chest x-ray may miss up to one liter of blood in the hemithorax.¹ Small hemothoraces may be detected on CT but not on initial chest x-ray. These rarely require intervention.² In addition, serial upright chest x-rays can be done to follow enlarging hemothoraces.

Pneumothorax is an additional complication of blunt chest trauma. The physical exam is also paramount in importance in diagnosis, especially with a tension pneumothorax. Signs of a tension pneumothorax are distended neck veins, hyperresonance of one hemithorax, tracheal deviation, and respiratory distress. Treatment includes placement of a thoracostomy tube at the 4th or 5th intercostal space in the mid-axillary line. If tube thoracostomy is not immediately available, decompression can be accomplished with a catheter over the needle inserted in the 2nd intercostal space at the mid-clavicular line.

The chest x-ray is an essential part of the evaluation of the chest after blunt trauma. The majority of symptomatic pneumothoraces will be visible on plain x-ray. However, occult pneumothoraces (those appearing only on CT scanning) may also occur.^{2,3} In multiple trauma patients with an occult pneumothorax, especially those who will be requiring operative management of wounds, prophylactic placement of a chest tube has been advocated to avoid expansion of the pneumothorax under positive pressure ventilation.⁴

In addition to hemo-pneumothoraces, there are other causes of significant morbidity from blunt chest



Figure 1: A chest x-ray revealed nearly complete opacification of the left hemithorax, along with fractures of the sixth and seventh ribs.

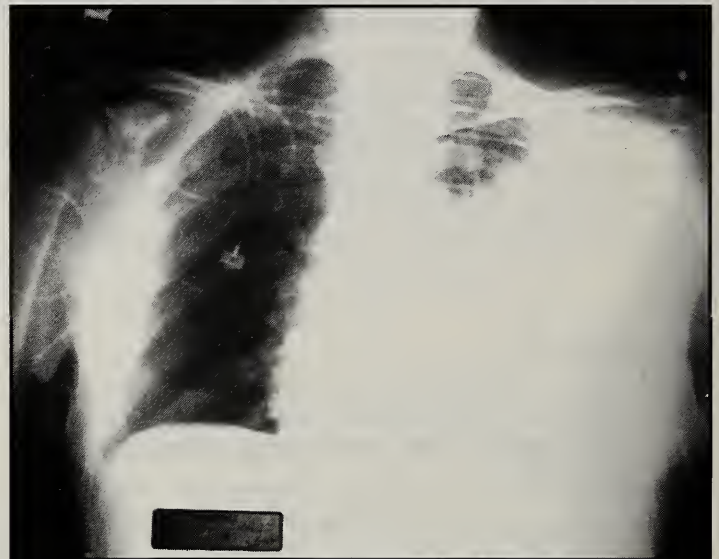


Figure 2: The left lateral decubitus film showed layering of the fluid.

trauma. Rib fractures, in many instances, can be diagnosed by physical exam. Pain on palpation of the involved rib and referred pain on anterior/posterior and lateral chest wall compression are nearly always present. In addition, one may find crepitance, or palpate a "click" over the involved rib. Many patients will splint towards the involved side to avoid the pain involved during thoracic expansion. Chest x-rays should be obtained in the majority of cases, but they are only 50 to 70 percent sensitive in demonstrating rib fractures on initial presentation.⁵ If the severe pain

is inadequately treated, patients may not take deep breaths or clear secretions and atelectasis and possibly pneumonia may develop. Finally, chest wall contusions and especially costal cartilage injury, may cause prolonged pain and morbidity.

Pain is the most frequent delayed sequela of blunt chest trauma, usually from rib or cartilage injury.⁶ As seen in this case, almost any complication of blunt chest trauma, aside from catastrophic aortic, major vessel, or cardiac injury, can present in a delayed manner. If a hemothorax is not detected until 2-3 weeks after the injury, some have advocated thoracotomy for complete drainage of the chest to avoid the complications of fibrothorax and empyema.^{1,6} However, this case was successfully treated with simple tube thoracostomy.

This case emphasizes the diligence one must have in evaluating a patient with blunt chest trauma. Although a chest x-ray need not be obtained in all cases, certainly those with significant pain, mechanism of injury, dyspnea, or decreased breath sounds deserve to be studied. The elderly and those with skeletal dis-

orders also deserve radiographic evaluation of the chest. Even if only a rib fracture is noted, documentation of this can be made and information can be given to the patient regarding prolonged pain, management of the pain, pulmonary toilet, and the signs and symptoms of pneumonia.

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Watch Closely

J. Kelley Avery, M.D.*

Case Report

A healthy 20-year-old woman near term came to the hospital about mid-morning complaining of some cramping and low back pain. Since she was at about 38 weeks gestation, she was observed in the emergency department (ED) for a short while before being admitted to the labor and delivery suite (L & D) in early labor. Her family physician knew from the initial prenatal examination that she had a marginal pelvis, but a trial of labor was thought to be a prudent course at that time.

Over a period of about five hours labor did not progress and she was sent for an x-ray of the pelvis to determine more precisely the cephalopelvic measurements. The baby appeared to be normal in size, but the radiologist's opinion was that delivery from below would be very difficult and dangerous. The need for cesarean section was discussed with the patient and her family. They agreed with the plan. Another five hours elapsed before the patient was taken to the operating room, where the operation was done by the patient's doctor. The baby was delivered and appeared to be normal, with Apgar scores of 8 and 9, and the baby was said to have a vigorous cry immediately after delivery.

In the nursery the baby's weight was 5 lb 13 oz, temperature 100°F (rectal), pulse 148/min, and respirations 36/min. "Some retraction" of the chest was noted on the initial nursery room note, but no nasal flaring was documented. The physician checked the baby on two occasions in the nursery during the first two hours of life. It is noteworthy that the respirations were recorded at 56/min on the second note. An x-ray of the chest, done at this point, reported "lungs still have a ground glass appearance. Heart somewhat indistinct and may be enlarged. There are prominent air bronchograms in the lateral projections." The impression of the radiologist was, "Respiratory distress without other definite abnormalities." The nurses in the nursery continued to record retractions, and about five hours after delivery, the nurses recorded respirations

at 80/min and "cyanosis about the mouth." The attending physician came to the hospital to see the baby and wrote as order, "Just watch the baby closely." At 6 hours of age the respirations were still recorded at 80/min and the physician was notified by phone. He ordered Flo-bi O₂ and it was given with some recorded improvement in the baby's color. Again two hours later the infant was said to be "dusky" in appearance. There is no mention in the record of the O₂ being discontinued, so one must assume that it was going continuously.

The dusky color continued, with rapid respirations, and retraction was recorded that seemed to be more pronounced as time went on. At 10 hours of age the infant's heart rate was recorded at 100/min, there was nasal flaring, more cyanosis, and loss of muscle tone. The decision was made at that time to transfer the baby to a neonatal intensive care unit in a nearby medical center. The first blood gases were done after the transfer team arrived and reported pH 6.7, PCO₂ 44.6, PO₂ 53.2, O₂ saturation 50.5. The transfer was accomplished without incident and the child survived, but with severe brain damage. A lawsuit was filed charging the physician with negligence in the delay in diagnosis of respiratory distress in the infant, and failure to effect a timely transfer of the baby to an appropriate facility.

Loss Prevention Comments

This case raises questions that must be asked. With a definitive diagnosis of a contracted pelvis and pelvic measurements that would not accommodate delivery from below, why the delay of more than five hours before doing the operation? The record would suggest that labor was going on all that time. With a 38 weeks gestation history and the apparent need for operative delivery, why wait and chance other unforeseen complications?

When did the attending physician see the x-ray report? This was a rural hospital, and the time of day that the picture was taken would suggest that it was not until the next day when the written report so definitely suggested respiratory distress. This may have been an occasion when the attending physician needed the help of the radiologist at the time the film was

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taken. If the physician was relying on his own interpretation of the chest x-ray, then one must wonder whether or not his interpretation was adequate to help in the treatment of this baby.

It is curious that the early and consistent finding of "retraction" by the nursery staff seemed to arouse little suspicion.

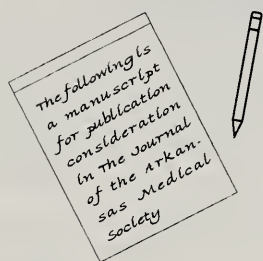
The respiratory rate was suspect from early in the life of this baby, arising from the initial 36/min to 56/min in the first hour of life. True, it did moderate somewhat with oxygen therapy, but the general trend was not reassuring. Why did not the attending physician write a definitive order for oxygen? How long was it given? Why was not a blood gas analysis ordered? Surely, with what we see here, the blood gas values could have prompted an early transfer.

While the nursery staff were "watching closely,"

there was a period of about six hours when the attending physician was not present to observe his patient. While the nurses were "watching closely" this baby became progressively hypoxic and acidotic. Certainly there was much evidence in the record that the nursing staff was not competent to care for a sick baby. This attending physician surely had to know that they were in over their head!

The questions of competence in this case were apparent. Competence of both the physician and the nursing staff is in question from this record. The conclusion here must be that, with a neonatal intensive care unit only an hour away, neither the physician of record nor the hospital staff knew where they were with this sick baby. Settlement of this lawsuit was necessary. ■

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Cardiology Commentary and Update

Debasis Das, M.D.*
J. David Talley, M.D.*

Angina and Atrial Fibrillation in a Patient with Thyrotoxicosis

Angina and atrial fibrillation are common cardiovascular manifestations of thyrotoxicosis. This symptom and sign may be the initial manifestations of thyrotoxicosis. We recently cared for a patient with exertional chest discomfort and atrial fibrillation secondary to thyrotoxicosis. There was no evidence of structural heart disease and the coronary arteries were normal angiographically. A review of relevant literature is presented.

Patient Report

History. A 42-year-old male presented with two-three weeks history of progressive exertional chest discomfort. One month earlier atrial fibrillation was noted at a community health center and treatment with digoxin and warfarin was begun. He had mild systemic arterial hypertension treated with an angiotensin converting enzyme inhibitor. He used tobacco but had no known prior medical illnesses. His mother died of myocardial infarction at the age of 61 years. He reported a 12-pound weight loss in the preceding two months and also experienced heat intolerance (See Complete Problem List, Table 1).

Physical Examination. The pulse was irregularly irregular with an average rate of 105/min. His blood pressure was 130/72 mmHg. There was no evidence of heart failure. A small, smooth goiter was felt. There was a soft systolic ejection murmur and varying intensity of heart sounds.

Laboratory Evaluation. Serial cardiac enzymes and the lipid profile were normal. The heart was normal size and the lung fields were clear on the chest x-ray. A 12-lead electrocardiogram showed atrial fibrillation with a rapid ventricular response (Figure 1). The serum TSH was <0.08 mIU/ml (normal 0.4-3.60 mIU/ml)

* Drs. Das and Talley are with the Division of Cardiology at UAMS.

Table 1: Complete Problem List

1. Exertional chest discomfort, atrial fibrillation, weight loss, heat intolerance → Thyrotoxicosis
2. Systemic Arterial Hypertension
3. Substance use
 - a. Cigarettes

and T4 was elevated at 22.3 microgram/dl (normal 4.5-11.5 microgram/dl). A transesophageal echocardiography showed normal left atrial and ventricular dimensions and normal left ventricular wall thickness. There was no evidence of valvular abnormality or intracardiac thrombi. The coronary arteries and ventriculography were normal at the time of cardiac catheterization.

Hospital Course. A diagnosis of thyrotoxic heart disease was made. An attempt at synchronized cardioversion of atrial fibrillation was unsuccessful. The patient's ventricular rate was controlled with 160 mg of propranolol and 0.375 mg of digoxin per day. He was started on 600 mg of propylthiouracil a day. Warfarin was continued.

Six weeks later his serum thyroxine level normalized although TSH level remained low at 0.08 mIU/ml. He remained in atrial fibrillation but was free of angina. A radioiodine thyroid uptake scan confirmed Graves' disease with a 4-hour uptake of 42% and a 24-hour uptake of 64%. He was then treated with an ablative dose of radioactive iodine.

A repeat elective cardioversion after achievement of euthyroid status was planned but the patient was lost in follow-up.

Discussion

Atrial fibrillation occurs in 9-22% of patients with thyrotoxicosis compared to 0.04% in the general adult

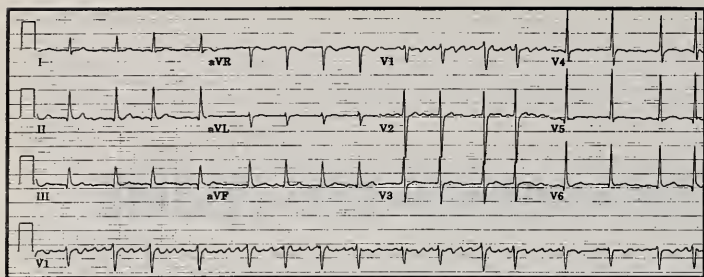


Figure 1: 12-lead electrocardiogram showed atrial fibrillation with a rapid ventricular response.

population.^{1,2} The frequency is higher in men and increases with advancing age. It is rare in patients under 40 year of age.

Atrial Fibrillation. The electrophysiologic basis of atrial fibrillation in thyrotoxicosis has not been established but an excess of thyroid hormone reduces the electrical threshold for atrial activation.³ Systemic embolism in thyrotoxic atrial fibrillation occurs in approximately 10 and 25% of patients.^{4,5} Therefore, anticoagulation with warfarin is recommended. The relative resistance to the effect of digoxin in controlling ventricular response is well known although the pathogenic mechanism remains unclear. Doherty and Perkins report altered pharmacokinetics of digoxin in thyrotoxic patients although multiple other mechanisms including altered pharmacodynamics are probably involved.^{6,7} The thyrotoxic state increases plasma clearance of vitamin K-dependent clotting factors and results in reduced requirement of warfarin for effective anticoagulation.⁷ About 60% of patients with thyrotoxic atrial fibrillation revert to sinus rhythm once they achieve euthyroid status and three-fourths of them do so within 3 weeks.⁸ Cardioversion and maintenance of sinus rhythm usually cannot be attained as long as hyperthyroidism persists, a fact particularly well demonstrated in our patient. Nakazawa et al recommend cardioversion in patients with persistent atrial fibrillation at about sixteenth week after achievement of euthyroid status.⁸

Exertional Chest Discomfort. Angina in the setting of thyrotoxicosis usually occurs in the setting of pre-existent coronary artery disease. However, more and more patients are being recognized where angina and other ischemic syndromes have occurred in the absence of any epicardial coronary artery stenosis.^{9,10} Featherstone et al have confirmed coronary artery spasm as a pathogenic mechanism although others have proposed mechanisms such as high myocardial oxygen demand, embolization, small vessel disease and thrombosis in situ.¹⁰ Our patient had classical symptoms of angina in the absence of any demonstrable coronary artery stenosis. Angina in this setting usually disappears with resolution of the hyperthyroid state, as was seen in our patient.

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State Health Watch

Information provided by the Arkansas Department of Health, Division of Epidemiology

New HIV/AIDS Cases Decline Overall But Increase Among Women, Minorities

While important gains have been made in preventing and treating AIDS, half of the 2,351 Arkansans diagnosed with the disease since 1983 are dead. Despite the well-publicized national decline in the number of new HIV/AIDS cases, women, heterosexuals and minorities increasingly are likely to get it.

The death rate among white males, blacks, Hispanics, and gay and bisexual men declined during 1996, but AIDS deaths among white Arkansas females increased 25 percent.

The 25 percent overall decline is more dramatic because the state AIDS death rate (7.1 deaths per 100,000 population) already was less than half the national average. Nationally, HIV/AIDS-related deaths through October 1996 declined 19 percent from the previous year.

Arkansas had 152 AIDS-related deaths in 1994, 167 in 1995 and 126 in 1996.

The Arkansas Department of Health confirmed 389 new cases of AIDS in 1993, 295 in 1994, 272 in 1995 and 266 in 1996. The department confirmed 225 new AIDS cases in Arkansas during 1997.

Although total numbers of new AIDS cases have been decreasing, the news isn't all good. Females accounted for 26 percent of new HIV cases in Arkansas during 1997, compared to only 23 percent in 1996 and 19 percent of the HIV cases reported in the state since 1983.

During 1997, females accounted for 20 percent of the new AIDS cases, while they have accounted for only 14 percent since 1983.

Blacks account for only about 12 percent of the state's population, but for 39 percent of the new AIDS cases in 1997 and 45 percent of the new HIV cases. Since 1983, 32 percent of the state's AIDS victims have been black.

The U.S. Centers for Disease Control and Prevention warns that a return to high-risk sexual behavior may put gay men at increased risk of AIDS. Clinics in San Francisco, Seattle and Portland, Ore., report a 74 percent increase between 1993 and 1996 in gonorrhea

among men who have sex with men. One CDC official warned, "More people are engaging in behaviors that put them at risk for sexually transmitted diseases, clearly with implications for HIV as well."

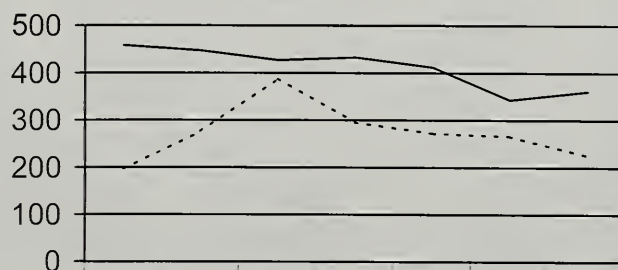
"The implications are clear, not only for gay men but for the general population, if this increased risky behavior correlates with people thinking the epidemic (is less serious) because of better therapies," according to Helene D. Gayle of the CDC at Atlanta.

Still, Gayle says, "We are entering a new era in this epidemic." The number of AIDS (U.S.) deaths between January and September 1996 was 30,700, versus 37,900 in the same period of 1995. She warned, however, that the trends were not equal across demographic categories. Blacks now account for the largest proportion of U.S. AIDS cases, 41 percent, she says, and AIDS is increasing most rapidly among women, particularly minorities."

She said that heterosexual AIDS cases are increasing at 15 percent to 20 percent a year, compared with increases of 5 percent or less among gay men and injecting drug users.

Article written by John Hofheimer of the Arkansas Center for Health Statistics. Reprinted with permission of Arkansas Health Counts, a publication of the Arkansas Center for Health Statistics, Arkansas Department of Health.

AIDS/HIV Cases in Arkansas



	1991	1992	1993	1994	1995	1996	1997
--- AIDS	196	276	388	295	272	266	225
— HIV	458	447	427	433	412	343	361

Reported Cases of Selected Diseases in Arkansas Profile for June 1998

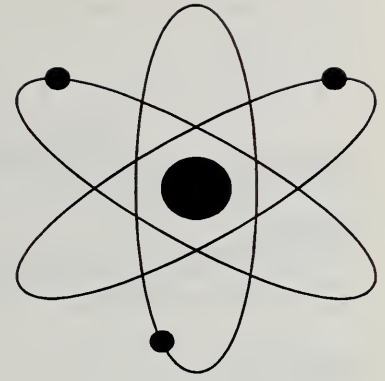
The three-month delay in the disease profile for a given month is designed to minimize any changes that may occur due to the effects of late reporting. The numbers in the table reflect the actual disease onset date, if known, rather than the date the disease was reported.

Disease Name	Total Reported Cases YTD 1998	Total Reported Cases YTD 1997	Total Reported Cases YTD 1996	Total Reported Cases 1997	Total Reported Cases 1996
Campylobacteriosis	76	73	91	175	241
Giardiasis	68	80	56	220	182
Salmonellosis	141	139	152	445	455
Shigellosis	95	107	39	273	176
Hepatitis A	50	132	264	223	500
Hepatitis B	49	47	47	106	93
Hepatitis C	2	3	4	5	7
Meningococcal Infections	22	25	26	38	35
Viral Meningitis	10	11	11	26	38
Ehrlichiosis	6	8	5	22	7
Lyme Disease	6	17	22	27	27
Rocky Mtn Spotted Fever	9	14	9	31	22
Tularemia	11	15	13	24	24
Measles	0	0	0	0	0
Mumps	0	1	0	3	1
Gonorrhea	1164	2381	2450	4388	5050
Syphilis	141	255	448	394	706
Pertussis	21	11	3	60	14
Tuberculosis	54	100	108	200	225

For a listing of reportable diseases in Arkansas,
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Radiological Case of the Month

Steven R. Nokes, M.D., Editor



Author

Steven R. Nokes, M.D.
Patrick Osam, M.D.

History:

A 10-year-old male presented with abdominal pain, fever of 103° and leukocytosis (WBC - 17,000). He did not experience nausea, vomiting or diarrhea. On physical exam the abdomen was soft and flat without rebound, guarding, or a mass. The bowel sounds were active. The child described his point of maximum discomfort to be above the umbilicus. A CT scan was performed (Figure 1).

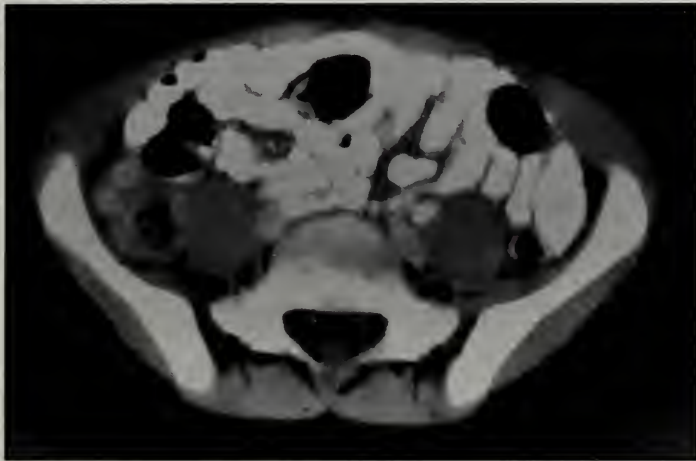


Figure 1a

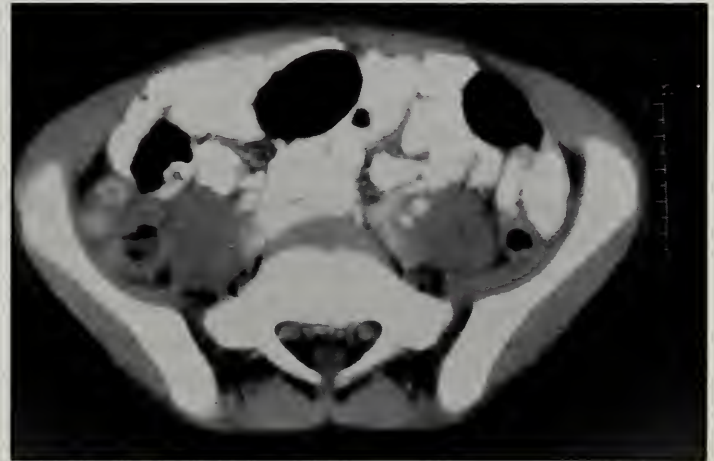


Figure 1b

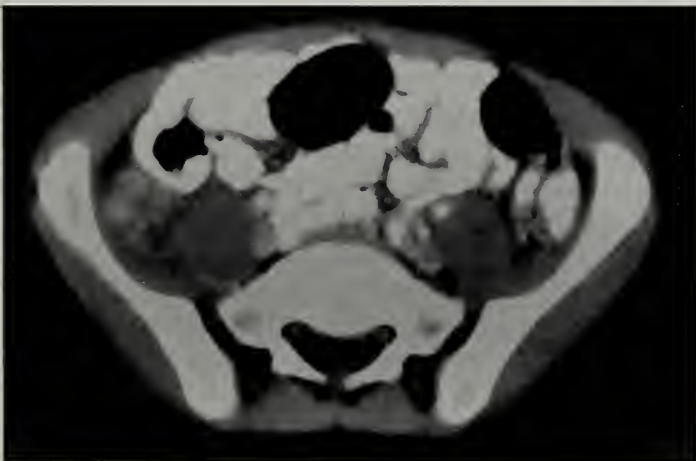


Figure 1c

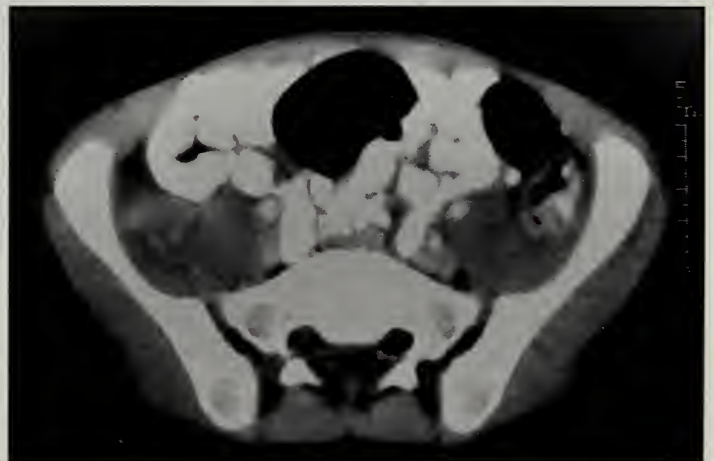


Figure 1d

Figures: Figure 1 (a-d). Helical 5 mm CT scans of the pelvis with oral and IV contrast.

Acute appendicitis

Diagnosis: Acute appendicitis.

Findings:

The CT study reveals an enhancing thickened appendix anterolateral to the cecum measuring 10 mm in width in the right lower quadrant. The surrounding fat planes are intact.

Discussion:

There has been considerable interest and controversy extending into the lay press, since an article by Rao et al in *The New England Journal of Medicine* described CT as 98% accurate in diagnosing appendicitis, and concluded that routine appendiceal CT improves patient care and reduces the use of hospital resources. Acute appendicitis is the most common cause of an acute abdomen, affects 6% of the U.S. population and necessitates 250,000 appendectomies a year. In at least 20% of patients with appendicitis the correct diagnosis is not made and this is the most frequently successful malpractice claim involving emergency room physicians. A delayed diagnosis increases the risk of appendiceal perforation, which increases postoperative complications to 39% (vs. 8% for simple appendicitis).

Helical CT has proven to be accurate in diagnosing appendicitis (93 - 98% accuracy). The diagnosis is based on observation of a distended thickened appendix (>6 mm), an enhancing appendiceal wall, periappendiceal inflammatory changes and/or the presence of an appendicolith. Associated cecal findings include focal cecal apex thickening, an arrowhead sign and a cecal bar. Usually, at least three signs are positive in each case.

The "focused appendiceal exam" touted by Rao et al has not found widespread support with radiologists and surgeons alike. This involves a limited scan through the cecum following rectal contrast administration only. Helical CT of the abdomen and pelvis using 5-mm slice thickness, oral contrast administration (at least one hour) and IV contrast has proven very accurate and has replaced graded compression ultrasound in our practice for atypical cases of appendicitis. CT is less operator dependent and frequently reveals an alternative diagnosis when the appendix is normal. While it is less expensive (using Medicare figures) to perform complete abdomen-pelvis CT scans on every patient if a hospital's negative appendectomy rate is 13% or higher, we currently reserve this procedure for atypical cases.

References:

1. Rao PM, Rhea TJ, Novelline RA, Mostafavi M, McCabe CJ. Effect of computed tomography of the appendix on treatment of patients and use of hospital resources. *NEJM* 1998; 338:141-146.
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4. Balthazar EJ, Rofsky NM, Zucker R. Appendicitis: The impact of computed tomography imaging or negative appendectomy and perforation rates. *Am J Gastroenterology* 1998; 93:768-771.
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6. Friedland JA, Siegel MJ. CT appearance of acute appendicitis in childhood. *AJR* 1997; 168: 439-442.

Editor and Author: Steven R. Nokes, M.D., Radiology Consultants in Little Rock.

Author: Patrick Osam, M.D., Surgical Clinic of Central Arkansas in Little Rock.

New Members

BATESVILLE

Moody, Melody Lynne, Pediatrics. Medical Education, UAMS, 1995. Internship/Residency, UAMS, 1998. Board pending.

BENTON

Higginbotham, Michael Shane, Family Practice. Medical Education, UAMS, 1995. Internship/Residency, Pine Bluff Family Practice, 1996/1998.

Lorio, Jerry Joseph, Orthopedic Surgery. Medical Education, Louisiana State University School of Medicine, Shreveport, 1993. Internship/Residency, UAMS, 1994/1998.

CONWAY

Woodard, Eric A., Internal Medicine. Medical Education, UAMS, 1995. Internship/Residency, UAMS, 1996/1998.

FORT SMITH

Smith, Gerald Patrick, Pathology. Medical Education, Southern Illinois School of Medicine, Springfield, 1993. Internship, University of Iowa College of Medicine, 1994. Residency, University of Missouri School of Medicine, 1998. Board certified.

HOLIDAY ISLAND

Lawrence, Neal Christopher, Family Practice. Medical Education, University of Texas Health Science Center, San Antonio, 1995. Internship/Residency, Cedar Rapids Medical Education Foundation, Iowa, 1998.

HOT SPRINGS

Erwin, John Scott, Family Practice. Medical Education, UAMS, 1995. Internship/Residency, AHEC-Southwest, 1996/1998. Board pending.

Quade, Deborah Sharon, Internal Medicine/Pediatrics. Medical Education, UAMS, 1994. Internship/Residency, 1996/1998. Board pending.

Wagenhauser, Karl F., Emergency Medicine. Medical Education, University of Texas Health Science Center, Houston, 1994. Internship/Residency, Eastern Virginia Medical School, Norfolk, 1995/1998. Board eligible.

JONESBORO

Nissenbaum, Eliot Mark, Cardiology. Medical Education, New York College of Osteopathic Medicine, Old Westbury, 1991. Internship/Residency, Maimonides Medical Center, 1992/1994. Board certified.

LITTLE ROCK

Davis, Scott Anthony, Cardiology. Medical Education, UAMS, 1992. Internship/Residency, UAMS, 1993/1995. Fellowship, St. Luke's Episcopal Hospital/Baylor College of Medicine, Houston, Texas, 1998. Board pending.

Hendricks, Betsy Maria, Family Practice. Medical Education, UAMS, 1995. Internship/Residency, UAMS, 1996/1998.

Kahn, Nancy E., Family Practice. Medical Education, University of Miami School of Medicine, Florida, 1987. Internship/Residency, University of California-San Diego School of Medicine, 1988/1990. Board certified.

MONTICELLO

Connelley, Jay Ross, Family Practice. Medical Education, UAMS, 1992. Internship, Lexington, Kentucky, 1993. Residencies, UAMS/AHEC-Pine Bluff, 1996/1998.

PINE BLUFF

Coutts II, William G., Family Practice. Medical Education, UAMS, 1995. Internship/Residency, UAMS AHEC-Pine Bluff, 1996/1998. Board pending.

Morris, Gerald Clifton, Family Practice. Medical Education, Tulane University School of Medicine, New Orleans, Louisiana, 1969. Internship, Philadelphia General Hospital/Jefferson Medical College, 1970. Residency, George Washington University, 1974. Board eligible.

SPRINGDALE

Heilman, Myra Kathlyne, Obstetrics/Gynecology. Medical Education, University of Missouri School of Medicine, Columbia, 1989. Residency, University of Missouri School of Medicine, Columbia, 1993. Board certified.

Sanders, Scott Mitchell, Pediatrics. Medical Education, UAMS, 1995. Internship/Residency, Arkansas Children's Hospital, 1996/1998.

STUTTGART

Wood, Gary P., Obstetrics/Gynecology. Medical Education, UAMS, 1965. Internship, Menorah Medical Center, Kansas City, 1966. Residency, University of Mississippi School of Medicine, Jackson, 1971. Board certified.

RESIDENTS

Barton, Lance W., Family Practice. Medical Education, UAMS, 1996. Internship, UAMS, AHEC-Northeast, 1997. Residency, UAMS, AHEC-Northeast.

Berestnev, Konstantin V., Family Practice. Medical Education, Volgograd Medical Academy, Russia, 1996. Residency, UAMS, AHEC-Fort Smith.

Devarajan, Sumathi, Rotating. Medical Education, J.S.S. Medical College, Mysore, Karnataka, India, 1991. Internship, J.S.S. Hospital, India, 1993.

Edington, Bruce Leon, Family Practice. Medical Education, Ross University, Dominica, 1997. Residency, UAMS, AHEC-Pine Bluff.

Horan, Chris Howell, Family Practice. Medical Education, UAMS, 1998. Internship/Residency, UAMS, AHEC-Ft. Smith.

Irish, Katherine A., Family Practice. Medical Education, Universidad de Costa Rica, San Pedro, 1996. Residency, UAMS, AHEC-Ft. Smith.

Kerriuan, Brian Richard, Family Practice. Medical Education, University of New England, College of Osteopathic Medicine, Biddeford, Maine, 1996. Internship, Berkshire Medical Center, Pittsfield, Massachusetts, 1997. Residency, UAMS, AHEC-Pine Bluff.

Lynn, W. Steven, Family Medicine. Medical Education, Oklahoma State University College of Osteopathic Medicine, Tulsa, 1998. Internship, UAMS, AHEC-Pine Bluff.

Manarang, Don Vergara, Family Practice. Medical Education, Kirksville College of Osteopathic Medicine, Kirksville, 1996. Internship, Deaconess Hospital, St. Louis, Missouri, 1997. Residency, UAMS, AHEC-Ft. Smith.

Molina, Diane Kimberley, Family Practice. Medi-

cal Education, University of Texas Medical School, San Antonio, 1998. Residency, UAMS, AHEC-Ft. Smith.

Noel, Stacey Wray, Family Medicine. Medical Education, UAMS, 1998. Internship/Residency, UAMS, AHEC-Pine Bluff.

Onglao, Ana Maria Nantes, Family Practice, Medical Education, Manila Central University, Philippines, 1989. Residency, UAMS, AHEC-Pine Bluff.

Overholt, Shelley, Family Practice. Medical Education, University of Texas Medical School, Houston, 1998. Residency, UAMS, AHEC, Ft. Smith.

Pothuluri, Nomita Jairaj, Family Practice. Medical Education, UAMS, 1998. Internship, UAMS, AHEC-Pine Bluff.

Reddy, Shankari Singi, Family Practice. Medical Education, Sri Ramachandra Medical College and Research Institute, India, 1991. Internship, Sri Ramachandra Medical College Hospital, 1992. Residency, UAMS, AHEC-Pine Bluff.

Slabbert, Christiaan J., Family Medicine. Medical Education, University of Pretoria, South Africa, 1986. Internship, University of Pretoria, 1987. Residencies, University of Pretoria, 1994, and UAMS, AHEC-Ft. Smith.

Wang, Xia, Physical Medicine and Rehabilitation. Medical Education, Sun-Yatsen University for Medical Science, P.R. China, 1984. Internship, UAMS.

STUDENTS

Ryan L. Hendren

Brad Russell Johnson



Things To Come

October 1 - 3, 1998

Contemporary Cardiothoracic Surgery. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

October 14 - 18, 1998

1998 Infectious Disease Board Review: A Comprehensive Review for Board Preparation. Ritz-Carlton Hotel, Tysons Corner, McLean, Virginia. For more information, call the Center for Bio-Medical Communication, Inc., at 201-385-8080, extension 26.

October 15 - 16, 1998

24th Annual Symposium on Obstetrics & Gynecology. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

October 17, 1998

Urinary Incontinence and Female Urology. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

October 23 - 24, 1998

5th Annual Cancer Update for Primary Care Providers. Hyatt Regency, New Orleans, Louisiana. Sponsored by the Alton Ochsner Medical Foundation and the American Cancer Society, Mid-south Division. For more information, call 504-842-3702 or 1-800-778-9353.

October 30 - 31, 1998

3rd Annual Fingers to Toes: Comprehensive Orthopaedic Review Course for Primary Care Physicians. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

November 6 - 7, 1998

Minimally Invasive Surgery at the Millennium. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Institute for Minimally Invasive Surgery and the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

November 15 - 19, 1998

American Public Health Association: 126th Annual Meeting and Exposition. Washington D.C. Sponsored by the American Public Health Association. For more information, call 202-789-5620.

December 12, 1998

Contemporary Management of Acute Myocardial Infarction. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

Arkansas Foundation for Medical Care Quarterly Video Conference:

Video conference

Time: 12 noon to 1:30 p.m.

Date: November 19.

Location: UAMS education building/AHECs
and Rural Hospital Affiliates

For more information,
contact Patricia Williams or Cindy Jones
at 501-649-8501, ext. 203.

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Keeping Up

September 22 & 29, 1998

Physician's - ACLS, St. Joseph's Regional Health Center, Mercy Room, Hot Springs. For more information, call 501-622-1024.

September 24, 1998

Asthma - North Arkansas Regional Medical Center Conference Room 1, Harrison. Time: Noon. Sponsored by North Arkansas Regional Medical Center. For more information, call 870-365-2098.

October 2 - 3, 1998

Epilepsy 1998: Second Annual UAMS Epilepsy Symposium - Friday: UAMS Education Three Building, Room G225; and Saturday: UAMS Education Three Building, Pauly Auditorium, G219. Sponsored by UAMS College of Medicine, Department of Neurology. For more information, call (501) 661-7962.

October 3, 1998

Second Annual Drug Update - ACRC Walton Auditorium, 5th and Elm Streets, Little Rock. Sponsored by UAMS College of Medicine, Department of Family and Community Medicine, the Arkansas Chapter of AAFP and The Arthritis Foundation. For more information, call (501) 661-7962.

October 13, 1998

Osteoporosis - North Arkansas Regional Medical Center Conference Room, Harrison. Time: Noon. Sponsored by North Arkansas Regional Medical Center. For more information, call 870-365-2098.

October 23, 1998

7th Annual NWA Regional Perinatal Conference - Holiday Inn Convention Center, Springdale. Sponsored by Washington Regional Medical Center. For more information, call 501-442-1823.

October 30 - 31, 1998

First Annual Anatomic Pathology Conference - Fairfield Bay Conference Center, Fairfield Bay. Sponsored by UAMS College of Medicine, Department of Pathology. For more information, call (501) 661-7962.

November 3, 1998

Head and Neck Cancer - North Arkansas Regional Medical Center Conference Room, Harrison. Time: Noon. Sponsored by North Arkansas Regional Medical Center. For more information, call 870-365-2098.

November 6, 1998

Baptist Heart Center Update - Baptist Medical Center, J.A. Gilbreath Conference Center, Little Rock. Sponsored by Baptist Medical Center. For information, call (501) 202-2673.

November 6 - 7, 1998

The Dennis Lucy Neurology Symposium - Fairfield Bay Conference Center, Fairfield Bay. Sponsored by UAMS College of Medicine - Department of Neurology. For more information, call (501) 661-7962.

November 12 - 13, 1998

Fifteenth Annual Conference on Perinatal Care - Riverfront Hilton, North Little Rock. Sponsored by UAMS College of Medicine - Department of OB/GYN. For more information, call (501) 661-7962.

Recurring Education Programs

The following organizations are accredited by the Arkansas Medical Society to sponsor continuing medical education for physicians. The organizations named designate these continuing medical education activities for the credit hours specified in Category 1 of the Physician's Recognition Award of the American Medical Association.

FAYETTEVILLE-VA MEDICAL CENTER

Medical Grand Rounds/General Medical Topics, Thursdays, 12:00 noon, Auditorium, Bldg. 3

FAYETTEVILLE-WASHINGTON REGIONAL MEDICAL CENTER

Chest Conference, 1st Wednesday of every month, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Grand Rounds Conference, 3rd Wednesday of every month, 7:30 - 8:30 a.m., Baker Conference Center, breakfast provided.
Primary Care Conferences, every Monday, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Tumor Conference, every Thursday, 7:30 - 8:30 a.m., WRMC, Baker Conference Center, no fee, breakfast provided

HARRISON-NORTH ARKANSAS MEDICAL CENTER

Cancer Conference, 4th Thursday, 12:00 noon, Conference Room

HOT SPRINGS-ST. JOSEPH'S REGIONAL HEALTH CENTER

Grand Rounds, Starting in October, 2nd Tuesday of each month, 12:00 noon, St. Joseph's Mercy Room. Lunch provided.

LITTLE ROCK-ST. VINCENT INFIRMARY MEDICAL CENTER

Cancer Conferences, Thursdays, 12:00 noon, Southwestern Bell/Arkla room. Lunch provided.
General Surgery Grand Rounds, 1st Thursday, 7:00 a.m. Southwestern Bell/Arkla Room. Light breakfast provided.
Interdisciplinary AIDS Conference, 2nd Friday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Journal Club, Tuesdays, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Pulmonary Conference, 4th Wednesday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.

LITTLE ROCK-BAPTIST MEDICAL CENTER

Breast Conference, 3rd Thursday, 7:00 a.m., J.A. Gilbreath Conference Center
Gastroenterology/Surgery Journal Club, dates vary, AR Gastroenterology Memorial Medical Plaza, Suite 3A. Call 501- 202-2673 or 202-3888 for more information.
G.I. Problems Conference, 3rd Tuesday every other month beginning in April, 6:30 to 8:00 p.m., Shuffield Auditorium
Grand Rounds Conference, Wednesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Multidisciplinary Trauma Conference, 3rd Thursday each month, 5:00 to 6:00 p.m., location varies, call 501-202-2673 or 202-1406.
Pulmonary Conference, Tuesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Sleep Disorders Case Conference, Third Friday, 12:00 noon. Call 202-2673 for location. Lunch provided.

MOUNTAIN HOME-BAXTER COUNTY REGIONAL HOSPITAL

Lecture Series, 3rd Tuesday, 6:30 p.m., Education Building
Tumor Conference, Tuesdays, 12:00 noon, Carti Boardroom

The University of Arkansas College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor the following continuing medical education activities for physicians. The Office of Continuing Medical Education designates that these activities meet the criteria for credit hours in category 1 toward the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

LITTLE ROCK-ARKANSAS CHILDREN'S HOSPITAL

Faculty Resident Seminar, 3rd Thursday, 12:00 noon, Sturgis Auditorium
Genetics Conference, Wednesdays, 1:30 p.m., Conference Room, Springer Building
Infectious Disease Conference, 2nd Wednesday, 12:00 noon, 2nd Floor Classroom
Pediatric Grand Rounds, Tuesdays, 8:00 a.m., Sturgis Bldg., Auditorium
Pediatric Neuroscience Conference, 1st Thursday, 8:00 a.m., 2nd Floor Classroom
Pediatric Pharmacology Conference, 5th Wednesday, 12:00 noon, 2nd Classroom
Pediatric Research Conference, 1st Thursday, 12:00 noon, 2nd Floor Classroom

LITTLE ROCK-UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

ACRC Multi-Disciplinary Cancer Conference (Tumor Board), Wednesdays, 12:00 noon, ACRC 2nd floor Conference Room.
Anesthesia Grand Rounds/M&M Conference, Tuesdays, 6:00 a.m., UAMS Education III Bldg., Room 0219.
Autopsy Pathology Conference, Wednesdays, 8:30 a.m., VAMC-LR Autopsy Room.
Cardiology-Cardiovascular & Thoracic Surgery Conference, Wednesdays, 11:45 a.m., UAMS, Shorey Bldg., room 3S/06
Cardiology Grand Rounds, 2nd & 4th Mondays, 4:00 p.m., UAMS Shorey Bldg., 3S/06
Cardiology Morning Report, every morning, 7:30 a.m., UAMS, Shorey Bldg. room 3S/07
Cardiothoracic Surgery M&M Conference, 2nd Saturday each month, 8:00 a.m., UAMS, Shorey Bldg. room 2S/08
CARTI/Searcy Tumor Board Conference, 2nd Wednesday, 12:30 p.m., CARTI Searcy, 405 Rodgers Drive, Searcy.
Centers for Mental Healthcare Research Conference, 1st & 3rd Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research
CORE Research Conference, 2nd & 4th Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research
Endocrinology Grand Rounds, Fridays, 12:00 noon, ACRC Bldg., Sam Walton Auditorium, 10th floor
Gastroenterology Grand Rounds, Thursdays, 4:00 p.m., UAMS Hospital, room 3D29 (1st Thurs. at ACH)
Gastroenterology Pathology Conference, 4:00 p.m., 1st Tuesday each month, UAMS Hospital
GI/Radiology Conference, Tuesdays, 8:00 a.m., UAMS Hospital, room 3D29
In-Vitro Fertilization Case Conference, 2nd & 4th Wednesdays each month, 11:00 a.m., Freeway Medical Tower, Suite 502 Conf. rm
Medical/Surgical Chest Conference, each Monday, 4:00 p.m., UAMS Hospital, room M1/293
Medicine Grand Rounds, Thursdays, 12:00 noon, UAMS Education II Bldg., room 0131
Medicine Research Conference, one Wednesday each month, 4:30 p.m. UAMS Education II Bldg. room 0131A
Neuropathology Conference, 2nd Wednesday each month, 4:00 p.m., AR State Crime Lab, Medical Examiner's Office
Neurosurgery, Neuroradiology & Neuropathology Case Presentations, Thursdays, 4:00 p.m., UAMS Hospital OB/GYN Fetal Boards, 2nd Fridays, 8:00 a.m., ACH Sturgis Bldg.
OB/GYN Grand Rounds, Wednesdays, 7:45 a.m., UAMS Education II Bldg., room 0141A
Ophthalmology Problem Case Conference, Thursdays, 4:00 p.m., UAMS Jones Eye Institute, 2 credit hours
Orthopaedic Basic Science Conference, Tuesdays, 7:30 a.m., UAMS Education II Bldg., room B/107
Orthopaedic Bibliography Conference, Tuesdays, Jan. - Oct., 7:30 a.m., UAMS Education II Bldg.
Orthopaedic Fracture Conference, Tuesdays, 9:00 a.m., UAMS Education II Bldg., room B/107
Orthopaedic Grand Rounds, Tuesdays, 10:00 a.m., UAMS Education II Bldg., room B/107
Otolaryngology Grand Rounds, 2nd Saturday each month, 9:00 a.m., UAMS Biomedical Research Bldg., room 205
Otolaryngology M&M Conference, each Monday, 5:30 p.m., UAMS Otolaryngology Conf. room
Perinatal Care Grand Rounds, every Tuesday, 12:15 p.m., BMC, 2nd floor Conf. room
Psychiatry Grand Rounds, Fridays, 11:00 a.m., UAMS Child Study Center Auditorium
Surgery Grand Rounds, Tuesdays, 8:00 a.m., ACRC Betsy Blass Conf.

Surgery Morbidity & Mortality Conference, Tuesdays, 7:00 a.m., ACRC Betsy Blass conference room, 2nd floor
NLRVA Geriatric/Medicine Grand Rounds, Thursdays, 8:00 a.m., VAMC-NLR, Bldg 68, room 130
VA Medical Service Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D109
VA Pathology-Hematology/Oncology-Radiology Patient Problem Conference, Thursdays, 8:15 a.m., VAMC-LR, room 2E142
VA Psychiatry Difficult Case Conference, 4th Monday, 12:00 noon, VAMC-NLR, Mental Health Clinic
VA Lung Cancer Conference, Thursdays, 3:00 p.m., VAMC-LR, room 2E142
VA Medical Service Teaching Conference, Thursdays, 8:00 a.m., VAMC-NLR, Bldg. 68 room 130
VA Medicine-Pathology Conference, Tuesday, 2:00 p.m., VAMC-LR, room 2D109
VA Medicine Resident's Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D08
VA Physical Medicine & Rehab Grand Rounds, 4th Friday, 11:30 a.m., VAMC-NLR Bldg. 68, room 118 or Baptist Rehab Institute
VA Surgery Grand Rounds, Thursdays, 12:45 p.m., VAMC-LR, room 2D109, 1.25 credit hours
VA Topics in Rehabilitation Medicine Conference, 2nd, 3rd, & 4th Thursdays, 8:00 a.m., VAMC-NLR Bldg. 68, room 118
VA Weekly Cancer Conference, Monday, 3:00 p.m., VAMC-LR, room 2E-142
White County Memorial Hospital Medical Staff Program, once monthly, dates & times vary, White County Memorial Hospital, Searcy

EL DORADO-AHEC

Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., Warner Brown Campus, 6th floor Conf. Rm.
Behavioral Sciences Conference, 1st & 4th Friday, 12:15 p.m., AHEC - South Arkansas
Chest Conference, 3rd Wednesday, 12:15 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.
Dermatology Conference, 1st Tuesdays and 1st Thursdays, AHEC - South Arkansas
GYN Conference, 2nd Friday, 12:15 p.m., AHEC-South Arkansas
Internal Medicine Conference, 1st, 2nd & 4th Wednesday, 12:15 p.m., AHEC-South Arkansas
Noon Lecture Series, 2nd & 4th Thursday, 12:00 noon, Union Medical Campus, Conf. Rm. #3. Lunch provided.
Obstetrics-Gynecology Conference, 4th Thursday, 12:15 p.m., AHEC - South Arkansas
Pathology Conference, 2nd Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5. Lunch provided.
Pediatric Conference, 3rd Friday, 12:15 p.m., AHEC - South Arkansas
Pediatric Case Presentation, 3rd Tuesday, 3rd Friday, AHEC - South Arkansas
Surgical Conference, 1st, 2nd & 3rd Monday, 12:15 p.m., AHEC - South Arkansas
Tumor Clinic, 4th Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5, Lunch provided.
VA Hematology/Oncology Conference, Thursdays, 8:15 a.m., VAMC-LR Pathology conference room 2E142

FAYETTEVILLE-AHEC NORTHWEST

AHEC Teaching Conferences, Tuesdays & Wednesdays, 12:00 noon, AHEC Classroom
AHEC Teaching Conferences, Fridays, 12:00 noon, AHEC Classroom
AHEC Teaching Conferences, Thursdays, 7:30 a.m., AHEC Classroom
Medical/Surgical Conference Series, 4th Tuesday, 12:30, Bates Medical Center, Bentonville

FORT SMITH-AHEC

Grand Rounds, 12:00 noon, first Wednesday of each month, Sparks Regional Medical Center
Neuroradiology Conference, 1st Tuesday of each month, 12:00 noon, Sparks Regional Medical Center, 7th floor dining room
Neuroscience & Spine Conference, 3rd Wednesday each month, 12:00 noon, St. Edward Mercy Medical Center
Tumor Conference, Mondays, 12:00 noon, St. Edward Mercy Medical Center
Tumor Conference, Wednesdays, 12:00 noon, Sparks Regional Medical Center

JONESBORO-AHEC NORTHEAST

AHEC Lecture Series, 1st & 3rd Tuesday, 12:00 noon, Stroud Hall, St. Bernard's Regional Medical Center. Lunch provided.
Arkansas Methodist Hospital CME Conference, 7:30 a.m., Hospital Cafeteria, Arkansas Methodist Hospital, Paragould
Chest Conference, 2nd Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Citywide Cardiology Conference, 3rd Thursday, 7:30 p.m., Jonesboro Holiday Inn
Clinical Faculty Conference, 5th Tuesday, St. Bernard's Regional Medical Center, Dietary Conference Room, lunch provided
Craighead/Poinsett Medical Society, 1st Tuesday, 7:00 p.m. Jonesboro Country Club
Greenleaf Hospital CME Conference, monthly, 12:00 noon, Greenleaf Hospital Conference Room. Lunch provided.
Independence County Medical Society, 2nd Tuesday, 6:30 p.m., Batesville Country Club, Batesville
Interesting Case Conference, 4th Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Jackson County Medical Society, 3rd Thursday, 7:00 p.m., Newport Country Club, Newport
Kennett CME Conference, 3rd Monday, 12:00 noon, Twin Rivers Hospital Cafeteria, Kennett, MO
Methodist Hospital of Jonesboro Cardiology Conference, every other month, 7:00 p.m., alternating between Methodist Hospital Conference Room and St. Bernard's, Stroud Hall. Meal provided.
Methodist Hospital of Jonesboro CME Conference, 2nd Tuesday, 7:00 p.m., Cafeteria, Methodist Hospital of Jonesboro
Neuroscience Conference, 3rd Monday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch Provided.
Orthopedic Case Conferences, every other month beginning in January, 7:30 a.m., Northeast Arkansas Rehabilitation Hospital
Perinatal Conference, 2nd Wednesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Piggott CME Conference, 3rd Thursday, 6:00 p.m., Piggott Hospital. Meal provided.
Pocahontas CME Conference, 3rd Wednesday, 12:00 noon & 7:30 p.m., Randolph County Medical Center Boardroom
Tumor Conference, Thursdays, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Walnut Ridge CME Conference, 3rd & last Tuesday, 12:00 noon, Lawrence Memorial Hospital Cafeteria
White River CME Conference, 3rd Thursday, 12:00 noon, White River Medical Center Hospital Boardroom

PINE BLUFF-AHEC

Behavioral Science Conference, 1st & 3rd Thursday, 12:00 noon, Jefferson Regional Medical Center
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Orthopedic Case Conference, 2nd & 4th Wednesdays, 12:00 noon, Jefferson Regional Medical Center
Pediatric Conference, 3rd Wednesday, 12:00 noon, Jefferson Regional Medical Center
Radiology Conference, 3rd Tuesday, 12:00 noon, Jefferson Regional Medical Center
Southeast Arkansas Medical Lecture Series, 4th Tuesday, 6:30 p.m., Locations vary. Dinner meeting.
Tumor Conference, 1st Wednesday & 3rd Friday, 12:00 noon, Jefferson Regional Medical Center

TEXARKANA-AHEC SOUTHWEST

Chest Conference, every other 3rd Tuesday/quarterly, 12:00 noon, St. Michael Health Care Center
Neuro-Radiology Conference, 1st Thursday every month at St. Michael Health Care Center and 3rd Thursday of every month at Wadley Regional Medical Center, 12:00 noon.
Residency Noon Conference, Monday, Wednesday, Thursday, Friday each week, alternates between St. Michael Health Care Center & Wadley Regional Medical Center
Tumor Board, Fridays, except 5th Friday, 12:00 noon, Wadley Regional Medical Center & St. Michael Hospital
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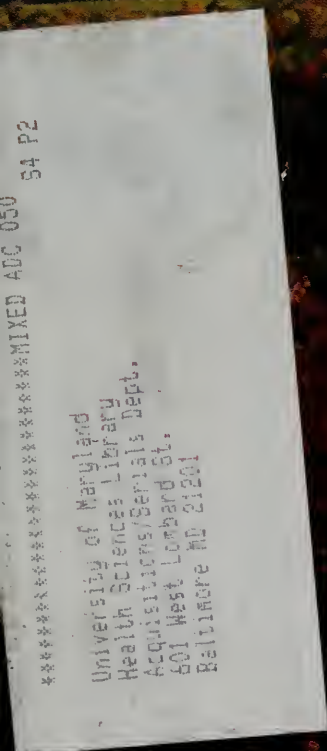
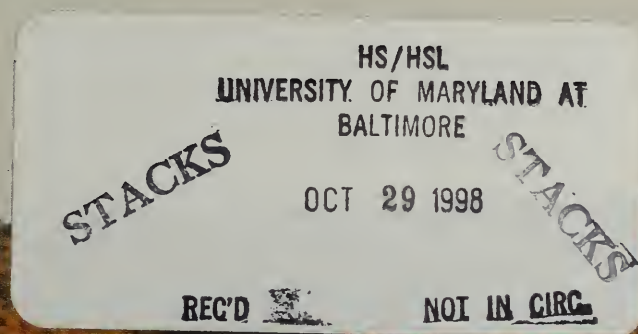
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THE **JOURNAL** OF THE **ARKANSAS** MEDICAL SOCIETY

Volume 95 Number 5

October 1998



October is Domestic Violence Awareness Month

Pregnant women in Arkansas surveyed on abuse - page 187

AMS Alliance lessens toll of domestic violence in Arkansas - page 183

Plus much more inside this issue

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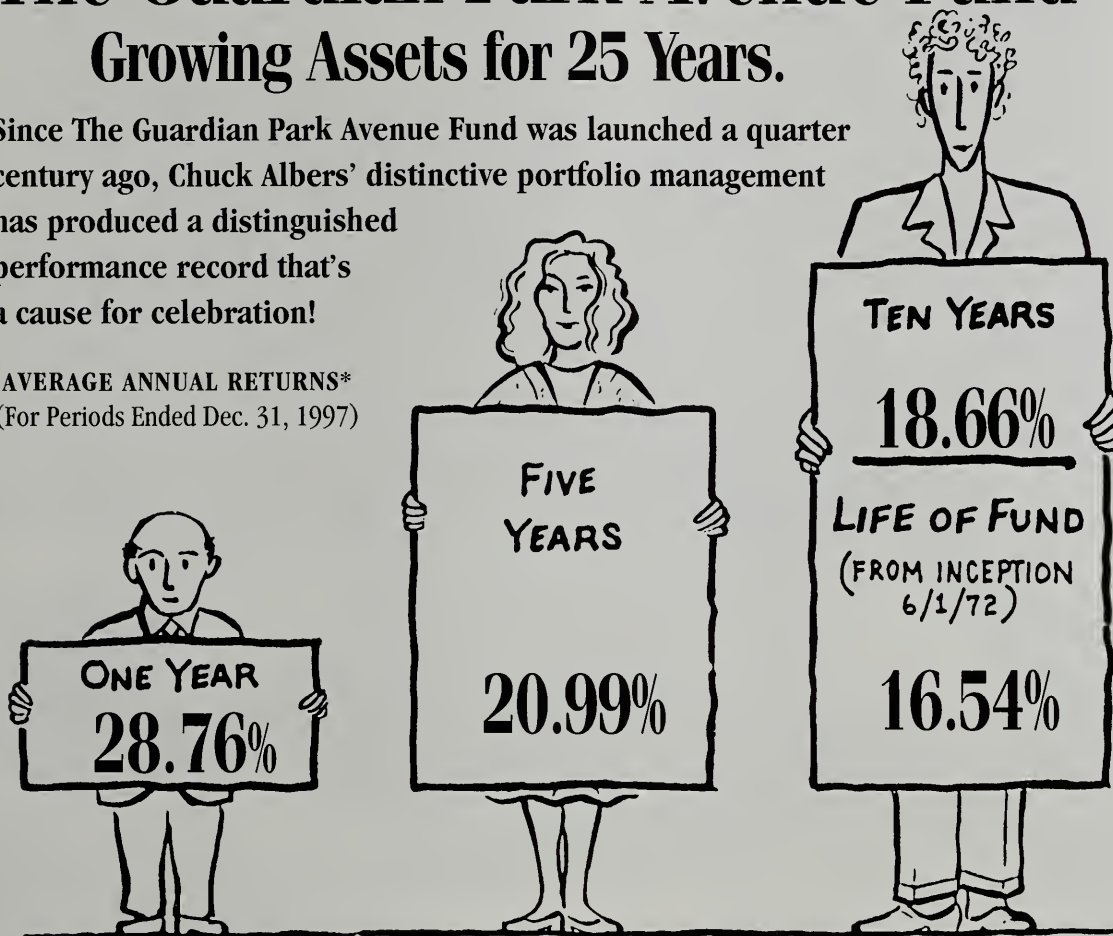
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THE JOURNAL OF THE ARKANSAS MEDICAL SOCIETY

Volume 95 Number 5

October 1998

*Award-Winning Journal of the Arkansas Medical Society
Recipient of the ASAE Excellence in Communications Award*

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Cover photo of the Ozarks was provided by the Arkansas Department of Parks & Tourism.

Ninety and Nine or Eighty/Twenty?

Samuel E. Landrum, M.D.*

With apologies to my colleagues who practice the Muslim religion, I wanted to write about a teaching from the Judeo-Christian tradition. There is a striking story in *Luke 15* that comes to mind when faced with the new ideals involved in practicing in the recent business environment that have become pervasive in managed care and other payment schemes. Jesus told of a man who had a hundred sheep, and one was lost. The man left the safely penned ninety-nine sheep and searched in the wilderness until he found the lost one. He brought the last sheep back to the fold, summoned his friends to rejoice with him about finding the last sheep, and they shared a greater joy in having the lost sheep returned than in the herding of the ninety-nine.

For years I have recognized and occasionally read of a natural phenomenon to the effect that eighty percent of the work can be done with twenty percent of the effort. Similarly, it has seemed that in most groups or organizations eighty percent of the work or eighty percent of donations raised is accomplished by twenty percent of the members. This is the EIGHTY/TWENTY pseudo-rule. Indeed it becomes far, far more difficult to make excellent grades on examinations than passing grades. Over the span of my practice in surgery, similar assessments of effort and results have become evident. It now seems to be "industry standard" that some studies or treatments are to be denied subscribers if the cost and time involved cannot be provided with the minimum effort or investment. The willingness to expend the extra eighty percent of effort to improve the result by twenty percent has nearly been lost.

The emphasis on making all effort to get the best for a patient seems to have passed from our discourse. We hear too often of "appropriate" care having been

given when reviewing cases of complications or outright disastrous occurrences. Who of us went to the trouble to clear the hurdles of medical school to be followed by the rigorous days and nights of residency to be "appropriate" or average physicians? Most, I think, were striving to become exceptionally good doctors! We persisted to do our best.

Dr. David Feliciano emphasized in a talk about some iatrogenic complications that we should not passively accept that a certain percentage of procedures will lead to a complication when that complication is avoidable. We have to hold the attitude that we must go to extra trouble to prevent those complications.

It is probably true that most often patients can be treated successfully with "routine" thought. However, this can lead to failure to diagnose a case of appendicitis early because there is a local epidemic of viral gastro-enteritis; and the doctor or nurse taking the call over the phone attributes the patient's complaints to what's "going around." True, in the majority of times this problem arises, it may be "appropriately" managed without the trouble needed to see the patient for a needed examination.

A former chief of mine was credited with the survival of many surgical patients because he stayed with the patient and refused to let them die. He retired from active practice to administrative duties at a multi-specialty clinic. He told me that the only bad part about the new position was having to check out complaints about patient care at the clinic. He said, "Mind you, there are not all that many complaints; but ONE is too many." I surely agree about that.

All this is not to suggest that I think physicians can be perfect. That's foolish; we deal with too many uncontrollable variables with diseases and patients and support staff. However, our diligence will be greatly reduced if we easily accept an attitude that our results

* Dr. Landrum is affiliated with Holt-Krock Clinic in Fort Smith and is a member of the editorial board for *The Journal of the Arkansas Medical Society*.

are good enough without carefully evaluating our mistakes and misadventures.

Also, I do not think that the development of "practice guidelines" opposes the sentiments expressed above. The surgical literature already is reporting the application of such standards (I detest that word; it's treated like holy writ) as having very beneficial effects upon the outcome of care for patients undergoing several different operations. It is noted, however, that the new improved results in some institutions when compared with their previous outcomes, are not any better than old outcomes in other hospitals. Thus, I think there will always be a need for some considered judgement in evaluating separate locales. Regrettably, this is frequently not found when having a procedure

approved by consulting with a clerk with a 1-800-number.

Furthermore, some of the best doctors that I have known were mavericks who would undoubtedly nowadays practice outside the "guidelines." They are the ones for whom most of the severe bylaws of our hospitals were written to get them to shape up. They are also the physicians upon whom you would call for a consult in the middle of the night with a desperate problem, and they would help!

Perhaps it is good to keep in mind the good shepherd searching for the hundredth lamb and avoid being lulled into the easier path of caring for the most patients with the least expenditure of effort or money. ■



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As of September 1, 1998, the Arkansas Health Care Access Foundation has provided free medical service to 14,413 medically indigent persons, received 27,378 applications and enrolled 53,437 persons. This program has 1,927 volunteer health care professionals including medical doctors, dentists, hospitals, home health agencies and pharmacists. These providers have rendered free treatment in 69 of the 75 counties.

Flu Vaccination Decreases Relative Morbidity Risk for People with Diabetes

People with diabetes are more likely to die from complications of influenza than people without hyperglycemia. From 1985 through 1987, national surveys on the health and mortality of the U.S. civilian population concluded that people with diabetes are about three times more likely than people without diabetes to die from flu and pneumonia-related complications. Each year, 10,000 to 30,000 people with diabetes die from complications of the flu and pneumonia. During flu epidemics, people with diabetes are six times more likely than people without diabetes to be hospitalized, and their death rates may increase 5 to 15 percent. This risk is particularly high when additional risk factors such as cardiovascular disease and kidney disease are present.

It is estimated that immunizations could prevent up to 80 percent of deaths associated with the flu, yet nearly two in three adults with diabetes do not get a simple, safe flu shot.

Aggressive efforts need to be taken to increase influenza immunization levels among people with diabetes in order to decrease flu-related morbidity and the number of preventable deaths.

Typically, physician-regulated diabetes care emphasizes aggressive control of the disease to retard the onset and progression of long-term complications affecting the eyes, kidney, and cardiovascular and nervous systems. Concentration may be only on diabetes itself, and not on the overall health of the patient. As a result, we may overlook general preventive measures, such as flu shots, that we would utilize with our patients without diabetes.

CDC is launching a national awareness campaign this fall to encourage people with diabetes to get a flu shot before flu season, which is generally November through March. We also recommend a pneumococcal vaccine for people with diabetes. Nationally representative data suggest that less than one in six persons with diabetes are immunized against pneumococcal pneumonia.

You can help by including influenza and pneumonia vaccinations as part of a regular diabetes management program. Please encourage your patients to be vaccinated to protect themselves from these preventable risks and "take control of their diabetes."

Article written by Dr. Frank Vinicor, director of the Centers for Disease Control and Prevention's Division of Diabetes Translation, and provided by the Department of Health & Human Services.

AFMC Study Reveals Cardiac Care Improving in Arkansas

A statewide cardiac project initiated by Arkansas Foundation for Medical Care has resulted in a nearly 60 percent increase in the use of potentially life-saving drugs called beta blockers by Arkansas physicians.

Using data collected in part by AFMC, studies published recently in the *New England Journal of Medicine* (August 20, 1998) and the *Journal of the American Medical Association* (August 19, 1998) highlight the importance of beta blocker usage. Beta blockers reduce stress on the heart by lowering blood pressure and heart rate. Studies show that patients receiving beta blockers after a heart attack are 43 to 50 percent less likely to die in the first two years after an attack than patients who do not receive these drugs.

At the start of the AFMC project in 1995, Arkansas physicians prescribed beta blockers to just 27 percent of eligible heart attack patients. Similarly, physicians throughout the U.S. under-used the drugs. Considering the proven effectiveness of this drug therapy in preventing cardiac death, experts recommend all eligible patients receive beta blockers after a heart attack.

AFMC collaborated with 62 Arkansas hospitals on the Cardiovascular Cooperative Project, a national project sponsored by the Health Care Financing Administration (HCFA). In less than two years, patients receiving beta blockers increased from 27 to 43 percent.

AFMC's project also resulted in a significant increase in the use of aspirin. A single aspirin given at the onset of a heart attack is highly effective in reducing the risk of death from heart attack. Aspirin is also useful in preventing a second heart attack after discharge from the hospital.

"This is a good start toward improved cardiac care in Arkansas," said William E. Golden, MD, Principal Clinical Coordinator for AFMC and Director of General Internal Medicine for UAMS. "Efforts made by Arkansas health care providers are significant; however, there is opportunity for improvement."

"Arkansas hospitals and physicians are becoming more attentive to benefits of beta blockade," said Golden. "I am confident that follow up will result in

even greater application of this highly effective class of drugs."

Information provided by Arkansas Foundation for Medical Care News Release dated August 27, 1998.

AMSA Seeking Contributions for Victims of Domestic Violence Scholarship

The Arkansas Medical Society Alliance (AMSA), in an effort to lessen the toll of domestic violence in Arkansas, is in the process of developing an endowed scholarship for students interested in pursuing a career in medicine or other allied health professions. The AMSA presented the Arkansas Physicians' Domestic Violence Prevention Project to doctors across Arkansas from 1994-1996. This scholarship will be the next step in furthering statewide educational efforts in the area of domestic violence.

One of the primary requirements for applicants, is that they must have been victimized by domestic vio-

lence in some form during the course of their life. For example - growing up in a home where they were a witness to domestic abuse or having a direct experience with domestic violence during adulthood.

AMSA has already set aside \$4,000 to put toward the scholarship. A total of \$15,000 is needed to endow the scholarship, leaving a balance of \$11,000 that must be reached. To accomplish this goal, the AMSA is asking for contributions from all Arkansas County Medical Societies as well as any person or organization interested. Checks may be made payable to AMSA and mailed to P.O. Box 721, Jonesboro, AR 72403. If you have questions or need additional information, contact Cathy Mackey at (870) 933-9449 or (870) 932-5209.

Contributions to this scholarship will be greatly appreciated and will be used to assist future healthcare providers of Arkansas, while continuing the educational process of domestic violence awareness.

Information provided by the AMS Alliance. ■



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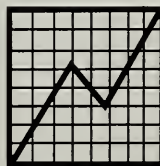
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AMS Newsmakers

Dr. Robert W. Arrington, a Little Rock physician of neonatal perinatal medicine, was recently recognized by UAMS with the Distinguished Alumnus Award. He is a member of the Class of 1968.

Dr. William D. Dedman, a family practitioner of Camden, was recently named the Arkansas Family Doctor of the Year by the Arkansas Academy of Family Physicians.

Dr. Richard Jackson, a Little Rock pediatric surgeon, was recently appointed by Gov. Mike Huckabee to serve on the Governor's Trauma Advisory Council.

Dr. Carl L. Nelson, a Little Rock orthopedic surgeon, was recently honored by UAMS with the Distinguished Faculty Award for 1998.

Dr. Walter R. Oglesby, a psychiatrist of Monticello, was recently awarded status as a Fellow of the American College of Forensic Examiners.

Dr. Kerry F. Pennington, a family practitioner of Warren, was recently installed as President of the Arkansas Academy of Family Physicians.

Dr. George Schroeder, a Little Rock ophthalmologist, was recently appointed by Gov. Mike Huckabee to serve on the Dispensing Opticians Board.

Dr. Harold Wilson, a family practitioner of Monticello, was recently installed as President Elect of the Arkansas Academy of Family Physicians.

The AMA Physician's Recognition Award is Awarded each month to physicians who have completed acceptable programs of continuing education. The AMS recipients for the month of August are: Frederick R. Broach, Little Rock; James W. Campbell, Hot Springs National Park; David B. Fraser, El Dorado; Clinton James Fuller, Little Rock; Michael Bruce Johnson, Little Rock; Thomas Wayne Koonce, Little Rock; Burton Allan Moore, Little Rock; and Kenneth Eugene Murphy, Conway.



(From left to right) Dr. Robert W. Arrington and I. Dodd Wilson, Dean of UAMS College of Medicine.

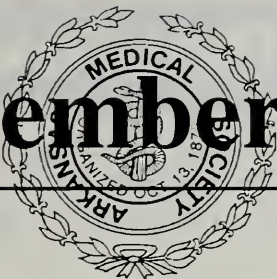


(From left to right) Dr. Laurie Hughes, UAMS Assistant Professor; Dr. Carl Nelson, UAMS Chairman of Orthopaedic Surgery; and Dr. Ken Martin, a Little Rock Orthopedic Surgeon, at the UAMS College of Medicine's 1998 recognition banquet.

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New Member Profile



Kevin D. Ganong, M.D.



PROFESSIONAL INFORMATION

Specialty: Endocrinology

Years in Practice: Four

Office: Jonesboro

Medical School: Jefferson Medical College in Philadelphia, Pennsylvania, 1989

Residency: Keelser USAF Medical Center, Biloxi, Mississippi, 1992

Fellowship: Wilford Hall USAF Medical Center, San Antonio, Texas, 1994

Other Business Affiliates/Organizations: United States Air Force from June of 1989 to June of 1998

Volunteer Work: Church Health Clinic Volunteer

PERSONAL INFORMATION

Family: Wife, Audrey; Children, Joel, 11 years old; Anna, 8 years old; Abigail, 8 years old; and Rachel, one year old

Date/Place of Birth: November 15, 1957, in Bangor, Maine

Hobbies: Soccer, woodworking, scuba diving and singing

THOUGHTS & OTHER INFORMATION

If I had a different job, I'd be: A Music Minister

Historical figure I most identify with: Teddy Roosevelt

Worst Habit: Playing computer games

Best Habit: Reading to my children

Favorite junk food: Cool Ranch Doritos

Behind my back, they say: Is he mad about something?

Most valued possessions: Power tools

People who knew me in medical school, thought I was: Bored

The turning point of my life was when: My first child was born

Nobody knows I: Have dreams about sick lab mice escaping

Favorite vacation spot: Ski slopes

One goal I haven't achieved, yet: Organizing my sock drawer

One goal I am proud to have reached: Being High School State Champion Long Jumper 2 years in a row

Favorite Childhood Memory: Trout fishing in Canada

When I was a child, I wanted to be: A milkman

One of my pet peeves: Long fingernails

First Job: Mowing lawns

Worst Job: Hot tar roofing

The last book I read: "The Bridge of San Luis Rey" by Thornton Wilder

One word to sum me up: Compulsive

My philosophy on life is: What? Me, worry?

Anything else you want to mention: Looking for time to learn hang-gliding

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Domestic Violence in Pregnancy:

A Survey of Obstetrical Patients at the UAMS Department of Obstetrics & Gynecology Clinics

Rosey E. Seguin, M.D.*

To evaluate for the presence of domestic violence in pregnant women in our obstetrical clinics, a pilot study was undertaken using the Partner Violence Survey to gather data. This voluntary anonymous questionnaire was issued to willing participants in the clinics from October 1, 1997, to November 31, 1997. Of the 262 women who responded, 39 (14.9%) reported a history of previous or current partner abuse. Poor pregnancy outcomes including pre-term labor, low birth-weight, fetal injury and death, as well as maternal injury, are some of the complications that have been reported in association with domestic violence. Routine screening of all obstetric patients is advocated to identify women at risk for these complications during their pregnancy. Further research is needed to evaluate the most effective interventions for these patients in our clinics.

Introduction

Domestic violence against women is a public health concern that is an epidemic problem in our society. Estimates indicate that the true incidence of partner violence may be close to four million cases a year¹ and that up to 12 million women may be at risk. Women of all ages, socioeconomic classes, cultures and educational backgrounds are potential victims. Of these women, many will be pregnant. Studies have shown that anywhere from 15 to 25% of pregnant women are battered during their pregnancy.¹ In many instances, the abuse will begin in association with the pregnancy; in others, existing abuse will escalate during the pregnancy. Domestic violence can be a significant factor in perinatal and as well as maternal morbidity and mortality. Battered women are known to be two to four times more likely to give birth to low birth-weight in-

fants than are non-battered women.² Traumatic abortions with fetal deaths have also been reported in third-trimester gravidas who are hit or kicked in the abdomen during assaults.³ Increased rates of pre-term labor and chorioamnionitis have also been noted in women who experienced physical abuse during pregnancy,⁴ as well as higher rates of spontaneous abortion.

Obstetrical patients in Arkansas are not exempt from the domestic violence problems that are so prevalent throughout our country. In 1992, 66 women and girls of the 4,000 American women dead as a result of battering, were killed in our state.¹ It is not known if any of these victims experienced abuse during pregnancy. What is known however, is that victims are not being recognized on a routine basis because they are not asked about abuse during pregnancy, a time when they may be more likely to disclose problems due to concerns for their fetus. To our knowledge, a survey of obstetrical patients had never been conducted to assess for the presence of partner abuse in the UAMS Department of Obstetrics and Gynecology clinics.

Methods and Materials

All women attending the antenatal clinics at the UAMS Community Women's Clinic and the University Women's Health Clinic between October 1, 1997, and November 31, 1997, were asked to participate in this cross-sectional survey on a one time voluntary basis by the interviewing nurse. Patients were asked to fill out the study questionnaire in the privacy of the bathroom if they were accompanied by their partner or in the examining room prior to examination by the physician. Once volunteers completed the survey, they were placed in a sealed box in the clinic check-out area.

Approval for the study was obtained from the UAMS Human Research Advisory Committee before initiation of the study. Privacy and confidentiality were

* Dr. Seguin is an Assistant Professor in the Department of Obstetrics and Gynecology at UAMS.

Table 1:
Questions Included in the Partner Violence Survey

1. Have you been hit, kicked, punched, or otherwise hurt by someone within the past year?
Yes No If yes, what relation are they to you?
2. Do you feel safe with your current partner? Yes No
3. Is there a partner from a previous relationship who is making you feel unsafe now? Yes No

assured, and no names appeared on the questionnaires. Because the survey was anonymous and participants could not be identified, informed consent from each patient was not necessary.

Patients excluded from the study were those who did not wish to participate, non-pregnant women and patients who could not read or write English.

An anonymous questionnaire using questions from the Partner Violence Survey,⁵ a validated screening instrument to detect partner violence, was administered to willing participants. The questions in Table 1 relating to partner abuse were included in the protocol.

The t-test was used on continuous variables and chi square analysis was used on categorical variables to compare the differences between those patients who did and those who did not experience domestic violence. Multiple logistic regression analyses was used to examine factors associated with partner violence while controlling for other confounding variable. SAS software was used for all of these analyses.

Results

Over the two-month study period, 260 volunteers participated in the study out of approximately 925 women attending obstetrical clinics in the department. The median age of participants in our study population was 21 years old, approximately half were white (53.3%), about half were married (47.7%), and most were unemployed/homemakers (41.9%) with a family income level of less than \$10,000 (36.8%). In addition, 27.9% had a high school education or some college and the median parity of the population was 1.5.

Overall, 39 women (14.9%) reported a history of previous or current abuse, findings which are similar to other studies which found the rates of physical abuse were 15% in women seeking care in prenatal clinics.⁶ Of those women who reported a history of abuse, 48.1% of the abusers were reported to be a partner or spouse, 18.5% were reported to be ex-boyfriends or ex-husbands, 14.8% were reported to be family members, and 11.1% of the reported abusers were friends. There were no significant differences by race, marital status, number of children, or income level between women who reported partner abuse and those who

did not. Though not statistically significant there was a trend toward increased rates of partner abuse in younger women and those with less education. These differences have also been reported in other studies.⁷ Characteristics of abuse victims are detailed in table 2.

Discussion

Domestic violence represents a serious threat to the health and well being of obstetrical patients and their offspring. The routine screening of all prenatal patients for domestic violence is crucial, if these victim are to be identified and provided with available assistance. Unfortunately, there continues to be a great amount of social stigma associated with domestic violence and many women are reluctant to report abuse. Another problem is the lack of a consistent definition for domestic violence and partner abuse, which can include not only physical abuse, but emotional, psychological, sexual and economic tactics as part of the abusive situation. It is generally accepted that domestic violence is under-reported and prevalence is much higher than studies suggest.

The present study found no difference in demographic factors between women who were abused and those who were not. Our findings are consistent with numerous other studies that have found domestic violence affecting women of all ages, socioeconomic classes and educational backgrounds.^{2,4,7,8} There are however several limitations in the current study. Self-report questionnaires are subject to bias and there was no comparison between private interviewing and self-reporting, which could possibly have yielded higher positive response rates. In addition, increased detection with repeated questioning on multiple prenatal visits has been reported,⁶ and our questionnaire was only administered once which may have also affected the positive rates of partner abuse that were found. Having partners present may also discourage many women from revealing details of abuse.

Conclusion

Pregnant victims of domestic violence constitute a frequently undetected high-risk group. It is difficult to ask sensitive questions about abuse, but prenatal care should include routine screening questions about domestic violence and necessary interventions should be provided for these women. Obstetricians have a particular responsibility to screen patients for domestic violence during prenatal care since this is a solvable health problem that can impact not only maternal health but the unborn infant as well. A reduced expenditure of health care dollars would also be anticipated with detection and early intervention. Assessment for

Table 2: Characteristics of Abuse Victims

Average Age:	23.9 yrs					
Race:	<u>White</u> 53%	<u>Black</u> 47%				
Marital Status:	<u>Married</u> 47.5%	<u>Single, Divorced, Widowed</u> 52.5%				
Income:	<u><5,00</u> 23%	<u>5,000-10,000</u> 14%	<u>10,000-20,000</u> 18%	<u>20,000-30,000</u> 16%	<u>30,000-40,000</u> 10%	<u>>40,000</u> 19%
# of Children:	<u>0</u> 44%	<u>1</u> 34%	<u>2</u> 22%			
Education:	<u><HS</u> 48.7%	<u>HS/GED</u> 20.5%	<u>Some College</u> 23.1%	<u>College Grad +</u> 7.7%		
Occupation:	<u>Unemployed</u> 43.6%	<u>Blue Collar</u> 15.4%	<u>White Collar</u> 15.4%	<u>Professional</u> 12.8%	<u>Student</u> 12.8%	

partner abuse is crucial to break the cycle of abuse and should be standard of care for all women.

Since domestic violence continues to be an unidentified problem in our obstetric population, protocols for identification are needed, as is a larger study sample with assessment of appropriate interventions.

Acknowledgment and Appreciation to: Sandra Pope, M.P.H., for the statistical analysis of the survey and for assistance in putting the survey together. Sandra Pope is director of UAMS Women's Health Research Consortium and Instructor in the UAMS Department of Obstetrics & Gynecology.

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Percutaneous Coronary Intervention versus Thrombolysis: *The Ongoing Debate*

J. David Talley, M.D.*

Clinical trials involving more than 100,000 patients with evolving Q wave myocardial infarction (MI) have shown that intravenous thrombolytic therapy is effective in restoring antegrade coronary blood flow, improving left ventricular (LV) function, and reducing mortality. Nevertheless, thrombolytic therapy has limitations. Some MI patients are not treated with a thrombolytic agent because they have a contraindication to its administration. Of those who receive thrombolytic therapy, about 25% fail to achieve early coronary artery reperfusion; another 30% have limited antegrade coronary flow; and early reocclusion occurs in about 10%. In those with infarction and cardiogenic shock, thrombolytic therapy does not reduce mortality. Finally, hemorrhagic complications or stroke may occur with thrombolysis, especially in elderly patients.

Consequently, there has been great interest in performing immediate cardiac catheterization and percutaneous coronary intervention (PCI) in the patient with evolving MI (so called "primary PTCA or percutaneous coronary intervention [PCI]"). Advantages of this approach includes: a) applicability to most infarction patients, especially those who are ineligible for thrombolytic therapy; b) confirmation of coronary occlusion in patients with equivocal electrocardiographic changes; c) immediate assessment of reperfusion success; d) the ability to assess and treat residual coronary stenoses; and e) acquisition of catheterization-derived prognostic variables.

Early observational studies of primary PCI reported a) high recanalization rates (>90%); b) a low in-hospital mortality (approximately 8%); and c) a favorable 1 year survival (>90%). Predictors of improved survival included preserved LV function, a patient infarct artery at hospital discharge, early reperfusion (within 2 hours

of pain onset), and single vessel coronary artery disease (CAD).¹ Conversely, the success rate of primary PCI was decreased in patients with depressed LV function, three-vessel CAD, or a tortuous infarct artery.² In addition, primary PCI of an occluded right coronary artery was associated with a higher rate of procedural complications and reocclusion than dilation of the other coronary arteries.

Since both primary PCI and thrombolysis are effective in recanalizing occluded infarct arteries and, are associated with excellent in-hospital and long-term survival, the issue of which therapy is optimal for the patient with an evolving infarction is controversial. Accordingly, several randomized studies comparing the two therapies have been completed³⁻⁷ (Table 1).

In each of the 5 randomized studies, patients presenting within 6 to 12 hours of the onset of acute MI were randomized to receive intravenous thrombolytic therapy (streptokinase or t-PA) or catheterization and PCI at centers experienced with its use. The GUSTO-IIb substudy was the only trial to use contemporary dosing of t-PA. Antegrade coronary flow was established in 80 to 99% of patients in whom primary PCI was attempted. Of note, it was not attempted if angiography demonstrated left main or severe three vessel coronary disease, or a "high risk" lesion. Thus, 4 to 5% of patients randomized to primary PCI underwent urgent coronary artery bypass surgery instead. In comparing primary PCI to thrombolytic therapy, several endpoints were evaluated including assessment of time to treatment, mortality, myocardial salvage, infarct artery patency, incidence of recurrent ischemia, and hospital costs.

Time to Treatment. In all studies, thrombolytic therapy was initiated 30 to 60 minutes more rapidly than primary PCI, even though PCI was performed promptly (average time from randomization to PCI,

* Dr. Talley is Professor of Internal Medicine and Director of the Division of Cardiology at UAMS.

Table 1: Prospective, Randomized Trials of Primary PCI vs. Thrombolysis

<u>Study</u> ^(REF)	<u>#Pts</u>	<u>Thrombolytic Agent</u>	<u>PCI success</u>	<u>Primary Endpoints</u>
Netherlands Trial ³	142	SK (1.5 mU/1 hr)	98%	1° Recurrent ischemia 1° Left ventricular ejection function 1° Coronary patency/stenosis
Mayo Clinic Trial ⁴	108	t-PA (0.6 mg/kg/4hr)	93%	1° Myocardial salvage 2° Hospital costs
PAMI-1 Trial ⁵	395	t-PA 100mg/3 hr)	99%	1° Death + non-fatal MI
Ribeiro, et al ⁶	100	SK 1.2 mU/1 hr)	80%	1° Coronary patency 2° Time to treatment 2° Left ventricular ejection fraction
GUSTO-IIb ⁷	1012	t-PA 100mg/90min	73% (TIMI-3) 20% (TIMI-2)	1° Death + MI + non-fatal disabling stroke

LVEF = left ventricular ejection fraction, SK = streptokinase, t-PA = tissue plasminogen activator

**Table 2:
In-Hospital Mortality in the Randomized Trials of Primary PCI vs. Thrombolysis**

<u>Study</u> ^(REF)	<u>#Pts</u>	<u>Time of Primary Endpoint</u>	<u>Mortality at the Primary Endpoint</u>		<u>P value</u>
			Primary PCI	Thrombolytic Therapy	
Netherlands Trial ³	142	Hospital discharge	0(0%)	4(6%)	NS
Mayo Clinic Trial ⁴	108	Hospital discharge	2(4.3%)	2(3.6%)	NS
PAMI-1 Trial ⁵	395	6 weeks	5(2.6%)	13(6.5%)	0.06
Ribeiro, et al ⁶	100	48 hours	3(6%)	2(2%)	NS
GUSTO-IIb ⁷	1012	30 days	32(5.7%)	40(7.0%)	0.033

NS = not significant

60 minutes) at centers with experienced personnel that were immediately available. Since reperfusion of an occluded infarct artery typically occurs 20 to 60 minutes following initiation of a thrombolytic agent, the overall time required to restore antegrade coronary flow is probably similar for thrombolysis and primary PCI (provided that the latter is performed expeditiously). Since the magnitude of mortality reduction is strongly influenced by the rapidity of reperfusion, withholding thrombolysis in order to transport the patient to a facility for primary PCI is deleterious.

Effect on Mortality. Mortality was similar for the thrombolysis and angioplasty treated patients in three of the four studies^{3,4,6} (Table 2). The PAMI-1 Trial showed a trend toward reduced in-hospital mortality with PCI, in large part because the patients receiving thrombolysis had a twice than expected stroke rate: the incidence of cardiac death was similar for the two treatments.⁵ A post hoc analysis was performed, and the patients were classified as "low risk" or "high risk," with the latter including those with anterior infarction, age >70 years, or heart rate >100 beats/minute.

Those "not at low risk" appeared to have a lower in-hospital mortality with primary PCI. However, further analyses revealed that only the elderly benefited from angioplasty. In fact, for those <65 years of age, the incidence of in-hospital death and reinfarction was similar with thrombolysis or PCI, regardless of heart rate or infarct location.⁸

In the GUSTO-IIb substudy, there was a beneficial effect with PCI at the primary endpoint of 30 days ($p = 0.033$), however, this survival benefit was not durable. At six months, the primary end point was seen in 14.1% of those who underwent PCA, compared to 16.1% of the t-PA group $p = ns$.

Myocardial Salvage. In one study, global LV ejection fraction at hospital discharge was significantly higher in patients who received primary PCI than in those treated with streptokinase (51 +/- 11% vs. 45 +/- 12%, respectively).³ This disparity may be due to differences in patient populations or the intravenous thrombolytic agent administered. Using technetium-99m sestamibi to measure myocardial perfusion, investigators at the Mayo Clinic assessed myocardial

**Table 3: Outcome of Patients Receiving Thrombolytic Therapy
or Primary PCI in the Community Setting**

	<u>Thrombolytic Therapy</u>	<u>Primary PCI</u>	<u>p Value</u>
<i>In-Hospital</i>			
Mortality			
All patients	5.6%	5.5%	0.9
High risk patients	8.1%	8.7%	0.7
Pts. at high volume centers	5.2%	5.4%	0.87
Mean hospital costs	\$16,838	\$19,702	<0.001
<i>At 3-year Follow-up</i>			
Mortality			
High risk patients	17.8%	24.8%	0.48
Pts. at high volume centers	12.1%	13.3%	0.76
Mean hospital costs	\$22,163	\$25,459	<0.001

From: Every NR, Parsons LS, Hlatky M, Martin JS, Weaver WD. A comparison of thrombolytic therapy with primary coronary angioplasty for acute myocardial infarction. N Engl J Med 1996;335:1253-1260.

savage by quantitating the change in size of the perfusion defect on left ventriculographic tomographic imaging before and after reperfusion.⁵ Primary PCI did not result in greater myocardial salvage than thrombolysis.

Infarct Artery Patency and Recurrent Ischemia. In two trials, coronary artery patency following treatment with thrombolysis or direct PCI was a primary endpoint. Ribeiro et al showed no difference in infarct artery patency at 48 hours among the primary PCI and thrombolysis treated patients (74% vs. 80%, respectively).⁶ Accordingly, the incidence of recurrent ischemia was similar for both groups (8% with PCI, 10% with streptokinase). In contrast, Zijlstra et al performed catheterization weeks after hospital discharge and showed that, in comparison to treatment with streptokinase, primary PCI was associated with increased infarct artery patency (91% vs. 68%, respectively) and a less severe residual stenosis of the infarct vessel (76% vs. 36% luminal diameter narrowing, respectively).³ This translated into fewer episodes of unstable angina, recurrent MI, and unplanned angioplasties. Coronary artery patency following treatment was not assessed in the Primary Angioplasty in Myocardial Infarction (PAMI) or Mayo Clinic studies, but both noted fewer episodes of recurrent ischemia in patients who received primary PCI.

Cost of Treatment. Two studies have examined the cost of therapy. In the Mayo study reported hospital costs associated with primary PCI and thrombolytic therapy and found no difference between the two treatment strategies as assessed at 12-month follow-up.⁹ Preliminary results from the GUSTO-IIb substudy have been reported. This report included only those patients enrolled from the United States. Resource utilization included both the hospital and physician charges.

Hospital charges were calculated using a "top down" economic approach using the patients hospital bill and charge to cost ratios. Physician charges were determined with the Medicare Fee Schedule. The total hospital bill for direct PCI \$13,337 compared to \$14,236 with the use of t-pa; a \$900 savings favoring PCI, $p = 0.004$. Physician charges were \$600 less with the use of t-PA, \$3,367 compared to PCI \$3,900, $p=0.001$. When hospital and physician costs were combined, there was a \$300 savings with the use of PCI, $p = 0.15$.

Primary PCI vs. Thrombolysis in the Community Setting

Since the randomized studies were conducted in small numbers of patients at centers highly experienced with emergency angioplasty, the magnitude of benefit associated with primary PCI is unclear, especially with regard to its long-term effects. Accordingly, an observational study of more than 3000 patients was performed to ascertain if the results of the smaller trials could be reproduced in a community setting.¹⁰ In this comparison of thrombolytic therapy and primary PCI, several observations were notable. First, the PCI success rates obtained in the community (89%) were lower than those reported in the smaller studies (98% in the PAMI study). Second, the mortality in-hospital and at three years was similar for both treatments, even at high volume PCI centers (Table 3). Third, the "high risk" patients (those with anterior infarction, age >70 years, or tachycardia) treated with thrombolysis had a similar in-hospital discharge and at three years were lower among the thrombolysis treated group: 30% fewer angiograms, 15% fewer angioplasties, and 13% lower costs after three years of follow-up. In short, in this large cohort of patients with MI in a community

Table 4: STENT - PAMI: Angiographic Results

	<u>Stent</u> (n = 452)	<u>PCI</u> (n = 448)	<u>P value</u>
Procedural Success	99.2%	97.7%	
TIMI - 3 Flow	88.6%	92.3%	
TIMI - 2 Flow	10.9%	7.2%	
Post-procedure MLD	2.55 mm.	2.11 mm.	0.001
Post-procedure % DS	19.6%	29%	0.0001

Abbreviations: DS = diameter stenosis, MLD = minimal luminal diameter, PAMI = Primary Angioplasty in Myocardial Infarction, PCI = percutaneous coronary intervention, TIMI = Thrombolysis in Myocardial Infarction

As presented by Grines CL. Late Breaking Clinical Trials: STENT - PAMI. Presented at the 47th Annual Scientific Session of the American College of Cardiology, Atlanta, GA, April 1, 1998.

setting, primary PCI did not offer a benefit (i.e., decreased mortality or resource utilization) over thrombolytic therapy.

Intra-Coronary Stenting in Acute Myocardial Infarction

The practice of intracoronary stenting in an attempt to interrupt an acute MI was previously considered taboo. However, new antiplatelet regimens and the use of higher stent-deployment inflation pressures leading to further vessel expansion have now dispelled the concern for placing a stent into this thrombogenic milieu. Several recent studies have focused on the strategy.

Single-center Investigations. Saito and colleagues noted an event-free survival of more than 85% in patients who underwent primary stenting as treatment of acute MI compared to approximately 64% who had direct PCI alone, $p = 0.014$.¹¹ The findings of this study must be interpreted cautiously. While prospective in design, the study was not randomized and included too few patients to have independent statistical significance.

Several investigators reported their experience with the use of an intracoronary stents as primary treatment of acute MI at the 45th Annual Scientific Session of the American College of Cardiology, Orlando, Florida, USA. Dr. Spaulding (René Descartes University, Paris, France) reported the immediate and long-term results of 45 patients who underwent direct PCI and subsequently placement of an intracoronary stent for a less than optimal balloon PCI result.¹² All patients had Thrombolysis in Myocardial Infarction (TIMI)-3 flow at the completion of the procedure. Six months after the procedure, 15% had angiographic restenosis, and 6% had ischemia by functional testing. Dr. Lefevre (ICV Paris Sud, Paris, France) observed an 8% occurrence of death, recurrent MI, acute vessel closure or coronary artery bypass graft surgery in 85 patients who had a stent(s) placed during direct PCI

(70 patients underwent primary stenting, 15 patients had a stent placed after failed rescue PCI).¹³ Dr. Steinhubl (Cleveland Clinic Foundation, Cleveland, Ohio, USA) reported a 93% survival in patients who had a stent placed at the time of acute MI.¹⁴

Multicenter Investigation. The preliminary results of the Stent PAMI (Primary Angioplasty in Myocardial Infarction) Trial were reported at the recent American College of Cardiology meetings in Atlanta (47th Annual Scientific Session of the American College of Cardiology, Atlanta, GA, March 29 - April 1, 1998).¹⁵ This study included 1457 patients, enrolled from 62 international clinical sites, of any age, having a MI less than 12 hours in duration, involving any vessel. The primary endpoint was a composite of death, recurrent MI, disabling stroke, or ischemia-driven target vessel revascularization (TVR) at 6 months after randomization. A total of 557 patients were excluded, 199 did not undergo percutaneous coronary intervention and 356 did not have coronary anatomy suitable for either balloon dilation or stent placement. Therefore, 900 patients were randomly allocated to undergo standard balloon angioplasty ($n = 448$) or stent placement utilizing the heparin-coated Johnson & Johnson Palmaz-Schatz stent ($n = 452$, Johnson & Johnson Interventional Systems Co., Warren, NJ, USA). There were no substantial differences in clinical or angiographic characteristics or time to treatment between the groups. Angiographic results are seen in Table 4. There was better post-procedure flow with standard balloon dilation (TIMI-3 flow 92.3% with balloon angioplasty vs. 88.6% with stenting). The minimal luminal diameter was higher and residual diameter stenosis lower with stent placement.

Overall, there was a trend of less in-hospital ischemic events in the patients who underwent primary stenting (Table 5).

At one-month, there were no differences in the occurrence of death, recurrent ischemia or infarction

Table 5: STENT - PAMI: In-hospital Clinical Events

	<u>Stent</u> (n = 452)	<u>PCI</u> (n = 448)	<u>P value</u>
Recurrent chest pain with ST-segment elevation	1.2%	3.5%	0.02
Recurrent MI	0.2%	0.7%	0.35
Target vessel revascularization	0.6%	2.5%	0.006
Death	3.1%	1.8%	0.15
Major bleeding	5.1%	3.8%	0.42

Abbreviations: MI = myocardial infarction, PAMI = Primary Angioplasty in Myocardial Infarction, PCI = percutaneous coronary intervention

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Table 6: STENT - PAMI: 1 -Month Clinical Events

	<u>Stent</u> (n = 452)	<u>PCI</u> (n = 448)	<u>P value</u>
Target vessel revascularization	0.9%	3.5%	0.006
Recurrent MI	0.4%	1.1%	0.29
Death	3.5%	1.8%	0.15
Death, Re-MI, disabling stroke, TVR	4.2%	5.4%	0.54

Abbreviations: MI = myocardial infarction, PAMI = Primary Angioplasty in Myocardial Infarction, PCI = percutaneous coronary intervention

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between the two treatment strategies (Table 6).

Direct PCI vs. Thrombolysis: Practical Considerations

When considering primary PCI as the preferred treatment for most patients with acute MI, several caveats should be kept in mind. First, since only 18% of hospitals in the United States have cardiac catheterization laboratories and even fewer have the capability of performing emergency PCI, its availability is limited. Although the patients with an acute MI who presents to a hospital without catheterization facilities can be transferred to one where the facilities are available, the associated delay in achieving reperfusion may outweigh the potential benefits. Second, the high PCI success rates achieved by the investigators of these trials are the result of their extensive experience with this technique, which may not be generally available. Third, since 5% of patients initially referred for primary PCI required urgent coronary artery bypass surgery, primary PCI should be performed in centers with experienced and immediately available cardiac surgeons. Finally, thrombolytic therapy has been proven efficacious in several placebo-controlled trials involv-

ing more than 100,000 subjects. The trials comparing primary PCI and thrombolysis have involved far fewer patients, and the data suggesting that "high risk" patients have decreased mortality with primary PCI are derived from a cohort of only 100 angioplasty patients.

Conclusions

Both primary PCI and intravenous administration of a thrombolytic agent are effective therapies for achieving reperfusion in the patient with acute MI. Primary PCI is safe and effective when it can be performed quickly by experienced operators in high volume centers. Because of its ease of administration, widespread availability, and proven efficacy, thrombolytic therapy remains the treatment of choice in most patients with acute MI. The primary goal of treatment for patients with evolving infarction should be the rapid and sustained restoration of antegrade coronary arterial flow, and the best therapy for the individual patient is the one that can be applied most safely and expeditiously.

Source: Lange RA, Cigarroa JE, Hillis LD. Thrombolysis or Primary PCI for Acute Myocardial Infarction. ACC Educational Highlights, 1997;12:1-4

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The Widening Spectrum of Lymphocytic Hypophysitis

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A case is presented of a nulligravida found to have wide-spread anterior pituitary insufficiency, hyperprolactinemia, and central Diabetes Insipidus, after presenting with aseptic meningitis. A cystic intra-sellar mass turned out to be pituitary destroyed by lymphocytic hypophysitis (LH).

In reviewing the relevant literature, the present report suggests that:

(a) The appearance of LH need have no relationship to pregnancy.

(b) Prior aseptic meningitis and/or the occurrence of central DI in a patient with an intra-sellar mass may be clues to the diagnosis of LH.

(c) Biopsy proof of LH might allow for resolution without the morbidity of hypophysectomy and the need for hormone replacement.

Introduction

The traditional view of lymphocytic adenohypophysitis (LH) is that it is an auto-immune disorder of the anterior pituitary, usually occurring during pregnancy or the first year post-partum; and that it can mimic a pituitary adenoma with respect to imaging, mass effects, and hormonal anomalies...but Diabetes Insipidus (DI) does not occur, because the posterior pituitary is not involved.¹ However, recent reports have led to an appreciation of the more varied settings in which this disorder may present. Thus, it

may occur unrelated to pregnancy, as well as in men.⁵ Central DI has been reported with a prevalence as high as 19% in some series⁵ of LH. Theoretically, central DI in LH may result from either inflammatory destruction, or compressive injury (mass effect), of the stalk or posterior pituitary; but, the rarity of DI with pituitary adenomas suggests, perhaps, that the former mechanism is more likely. Some describe⁴ a pathologically similar, but presumably rarer and distinct, entity, lymphocytic infundibulo-hypophysitis (LIH), to account for central DI. However, since reports of LIH describe imaging and histology similar to LH,^{2,3} and reports of each^{2,3} detail inflammatory involvement and varying endocrine abnormalities associated with both anterior and posterior pituitary in the same patient, it is reasonable to suppose that there is but one disease with varying extents of pituitary involvement in different individuals.

Awareness of the possible presence of LH is particularly important, since if the diagnosis is confirmed histologically, steroid therapy may be helpful, and spontaneous resolution of the hormonal deficiencies may occur without surgical extirpation.⁸⁻¹⁰

We describe herein a case whose unusual presentation serves to further emphasize the varied circumstances under which the disease may first appear. This suggests that, unless there is imminent visual loss from optic nerve compression, perhaps all pituitary masses suspected of being LH should be biopsied with careful preservation of normal pituitary tissue, with a view to attempting non-surgical treatment.

Case Presentation

The patient was a 32-year-old white female nulligravida who was hospitalized in December 1996 because of acute onset of meningitis, with severe headache,

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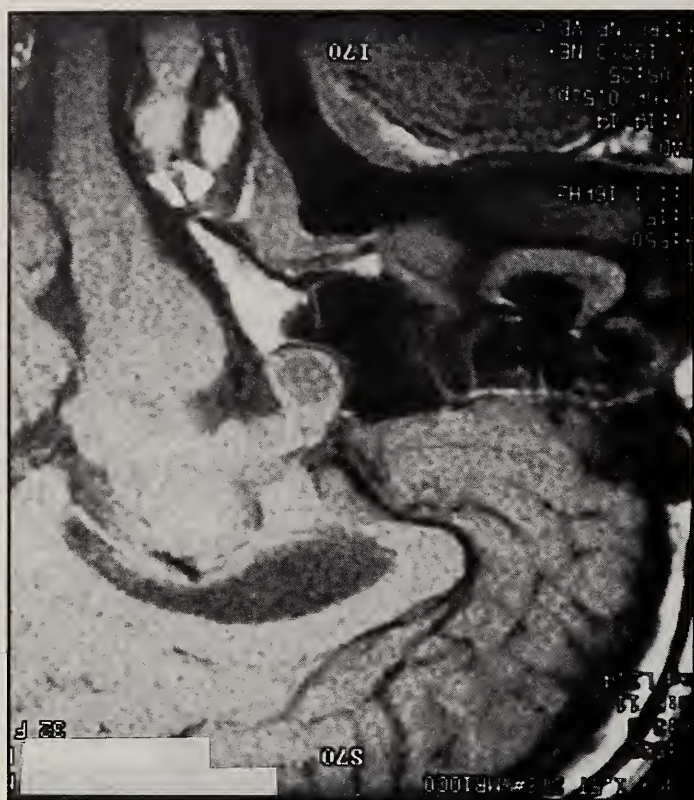


Figure 1A: MRI scan, sagittal view, showing enlarged pituitary with central hypointensity. This was read as "consistent with cystic/necrotic pituitary macro-adenoma."

vomiting, and progressive lethargy. In the previous 6-8 months, she had lost 27 lb. from anorexia, had suffered from bi-temporal headaches, and had developed amenorrhea without response to a progestin challenge. She was also bothered by recent onset of fatigue, cold intolerance, dry skin, polyuria and polydipsia. There was no hyperpigmentation.

Initial laboratory assessment showed a normal WBC, but a mild normocytic anemia with Hct = 34%. BUN, creatinine, electrolytes, albumin, globulin, liver function tests, glucose and urinalysis were all normal, except for mild hypokalemia (3.4 mEq/L.). Lumbar puncture yielded CSF containing 1000 cells/cc., with 50% PMN, 29% lymphocytes, 4% eosinophils, and 17% non-WBC. No organisms were seen on Gram stain. CSF protein concentration was 81 mg./dL., and that of glucose, 37 mg./dL. Cultures of both CSF and blood yielded no growth. CSF VDRL, cryptococcal antigen, and latex agglutination to bacterial antigens were all negative. Serum antibodies to Histoplasma, Cryptococcus, Blastomyces, Coccidioides, Aspergillus, Tularemia and Brucella were all negative. Serum IgG antibody titre to Herpes Simplex was positive, but IgM antibody titre was not. Serum angiotensin converting enzyme (ACE) was 102 U/L (19-79).

Chest x-ray showed no radiologic evidence of Sarcoidosis, and was read as normal.

Imaging studies of the brain (Fig 1.) showed a mixed density lesion of the sella turcica, suggestive of a possible pituitary macro-adenoma with cystic necro-



Figure 1B: CT scan, coronal view, showing sellar mass with hypodense central area. Left side of optic chiasm appears compressed.

sis. There was no associated calcification. The infundibulum was not clearly visualized.

Vomiting abated and she seemed to improve; but shortly thereafter, it recurred with diarrhea, headache and hypotension. A 24-hour urine for free cortisol showed none detectable (<14 mcg). The patient was given parenteral gluco-corticoids and responded nicely.

A prolactin level was modestly elevated at 65.9 ng./mL. T-4 was low at 4.2 mcg./dL. (5-12) and serum T3 was low-normal, at 82 ng./dL. (80-180), but TSH was only 0.84 mcU/mL (0.40-5.50). Serum estradiol was <10 pg./mL. (30-400), with both FSH and LH non-elevated. IGF-1 level was low at 104 ng./mL. (114-492). She was found to have central DI, after an overnight water deprivation test led to serum hyper-osmolality (317 mOsm/L.), plasma ADH <1.0 ng./mL. (1.0-13.3), and urine osmolality only 262 mOsm/L.

Formal perimetry disclosed no evidence of visual field defect in the right eye, and a possible superior constriction in the left.

Thus, generalized anterior pituitary insufficiency and central DI were clearly established. To explain both the relatively low level of prolactin as well as the aseptic meningitis, it was posited that she had an expanding non-secretory macro-adenoma resulting in anterior hypopituitarism, central DI and dopaminergic inhibition from stalk compression, and auto-infarction with meningeal penetration.

After appropriate replacement with gluco-corticoids, L-thyroxine, and DDAVP, she underwent trans-sphenoidal surgery. Upon entry to the sella, a fibrotically encapsulated cyst was encountered which, upon puncturing, exuded thick, tan fluid. No definite pituitary gland was visualized, although the infundibulum was recognized. Smears of the fluid revealed mucous debris and rare PMN's. Sections of the capsule showed most of the normal pituitary parenchyma replaced by fibrous tissue, mature lymphocytes, a few plasma cells, and aggregates of foamy macrophages (Fig 2). No granulomata, giant cells, or neoplasm were noted, and special stains were negative for AFB and fungi.

She has recovered from surgery, and is currently on intra-nasal DDAVP, 10 mcgm. bid, L-thyroxine, 0.1 mgm./d., prednisone, 4 mgm. po q AM and 2 mgm. q PM, conjugated equine estrogen, 0.625 mgm./d., and mydroxyprogesterone acetate, 2.5 mgm./d. She has good energy and appetite, and no nocturia. Electrolytes, BUN, creatinine, free T4, and serum T3 are all normal. Serum TSH is non-detectable (<0.03 mcU/mL). Serum prolactin level and CBC have both returned to normal. No attempt has been made to withdraw her from replacement hormones. On one occasion, when she forgot her morning dose of DDAVP, intense polyuria returned in a few hours.

Discussion

The diagnosis of LH is reasonably well established. Giant cell granuloma of the pituitary could produce similar radiologic and endocrine findings, but the histologic picture is inconsistent with this diagnosis. Further, the absence of osseous involvement, and the lack of eosinophils and Langerhans histocytes rules out Histocytosis X. Finally, although the ACE level was elevated, the lack of granulomata, the normal chest x-ray and the absence of hyperglobulinemia make Sarcoidosis untenable.

The fact that our patient was a nulligravida again emphasizes that LH need not have any relationship to pregnancy; and so, should correspondingly broaden the clinician's differential diagnosis of the pituitary mass.

Unfortunately, when it was first realized that there was intra-sellar pathology, she already had, except for hyperprolactinemia, symptomatic pan-hypopituitarism, with the gland severely damaged. This recalls the fact that undiagnosed hypopituitarism from LH may be fatal.⁵

The occurrence of aseptic meningitis with slight elevation of CSF protein, in association with LH, has been described at least twice before. Vanneste and Kamphorst⁶ reported a case of LH four months after an episode of aseptic meningitis. They raised the question of whether the meningitis, by viral-mediated im-

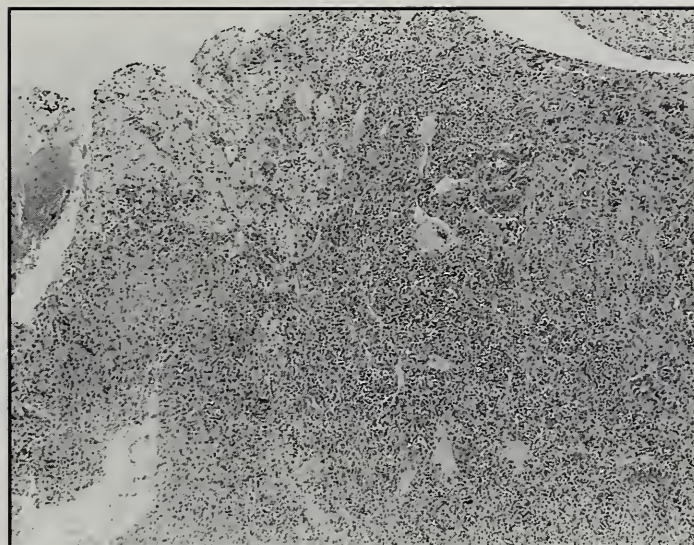


Figure 2A: The entire pituitary parenchyma is almost completely replaced by lymphocytic infiltrate. There is also a collection of foamy macrophages in the left upper corner. 13X (4X objective) Hematoxylin and Eosin.

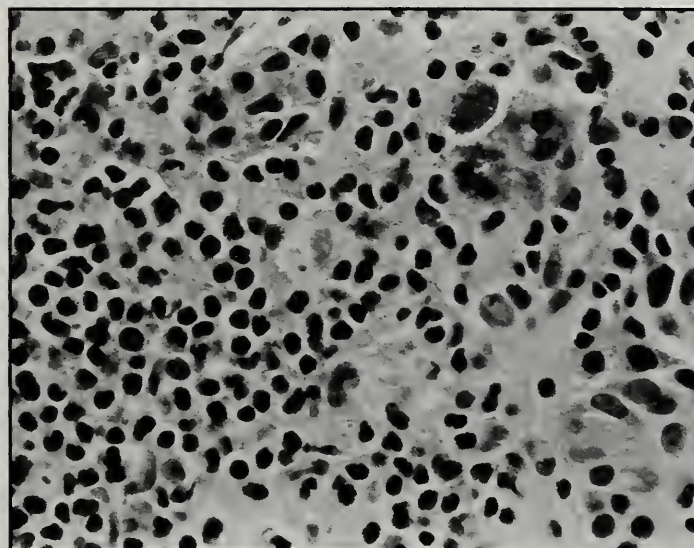


Figure 2B: Higher magnification showing the lymphocytic infiltrate replacing the pituitary parenchyma. 13 OX (40X objective) Hematoxylin and Eosin.

munologic mechanisms, may have caused LH. But in both the case of Paja et. al⁷ and in ours, aseptic meningitis was long preceded by signs of hypopituitarism, so it is likely that meningeal involvement reflected CSF invasion by the expanding inflammatory pituitary mass. Regardless of the mechanisms involved, we believe that a history of aseptic meningitis in association with a sellar mass should raise the question of LH.

Also amplified by our case, the presence of central DI, in association with a sellar mass, should suggest LH, since their concurrence has been shown⁵ to be not uncommon, while DI is rarely seen with pituitary adenomas.

Although elevated, the prolactin level was not at the level typically associated with macro-prolactinomas; and we postulated that the hyperprolactinemia was

due to stalk compression. This was confirmed by the normalization of serum prolactin following surgical decompression. Although we did not use bromocryptine, lowering of prolactin level with failure of the mass to shrink in response to this drug, would suggest that the mass is not a prolactinoma, and so raise the possibility of LH.

The clinical course of LH is highly variable. As stated above, it may be lethal if it causes untreated hypopituitarism. Yet, some cases¹⁰ are associated with spontaneous resolution. Some have reported a beneficial effect of steroid therapy^{8,9} in shrinking the mass and restoring pituitary function in LH; but in other proven cases⁵, such treatment has been ineffective.

In our case, the histologic picture, the post-operative non-detectable TSH level, and the continued need for DDAVP, all suggest permanent hypopituitarism. Yet, despite its inconsistent results, we think that, *in the absence of imminent potential catastrophe from mass effects*, a trial of anti-inflammatory steroid therapy is merited in those cases suspected early on clinical grounds of being LH; or proven at operation by biopsy, with careful preservation of normal pituitary tissue. Some patients would be thereby saved from the morbidity associated with hypophysectomy and the need for hormonal replacement.

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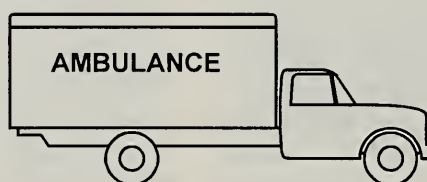
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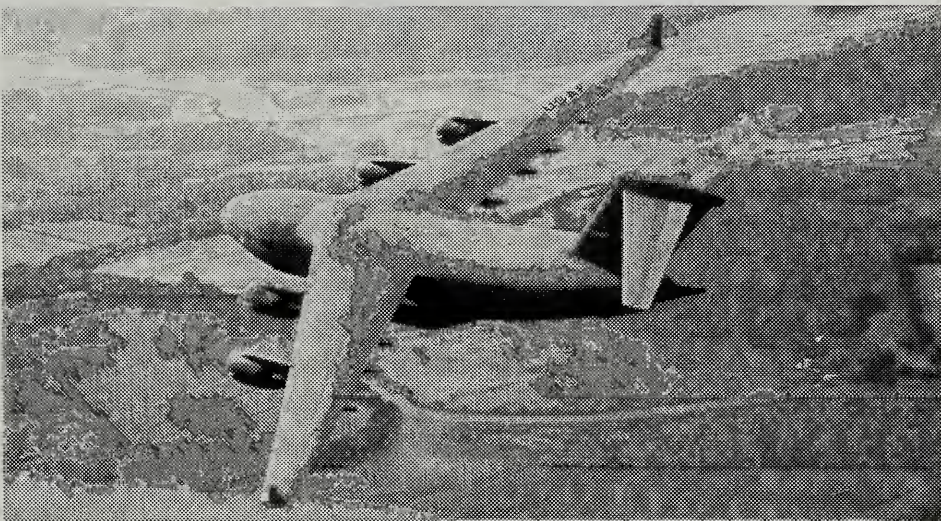
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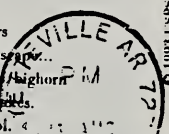


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Deadly Delay

J. Kelley Avery, M.D.*

Case Report

For the previous eight years, this 69-year-old man had been seen by his family physician (FP) for hypertension, gout, glaucoma, degenerative joint disease, and a variety of routine complaints. He was a moderately heavy smoker, was overweight, and had a history of hematuria for which he had been referred to a urologist, but no definite diagnosis was made as to the etiology of the complaint. Treatment of the hypertension consisted of a mild diuretic and a low salt diet. The documentation of his blood pressure readings during this time ranged between 180/90 mm Hg (under treatment) and 220/110 mm Hg when treatment was interrupted. Documentation of the encounters between the patient and his doctor was poor, with visits usually being documented with the impression only and no other indication of blood pressure, treatment, advice, or instructions as to return visits. He had been hospitalized once during this interval for acute gout, Bell's palsy (right), and hypertension. The treating physician in the hospital had been the consulting internist. Following the patient's discharge from the hospital, the internist wrote to the referring physician: "Thanks for the referral of (patient's name) during his recent admission. The discharge diagnosis: (1) Bell's palsy, (2) hypertension, and (3) gouty arthritis. He will be returning to see me in follow-up care."

This man was seen by the internist twice following this hospital stay. On these two visits PA, lateral, and oblique views of the chest were documented, with a final interpretation of some pleural thickening that was not thought to be of significance, and cardiomegaly, presumably due to the man's longstanding hypertension. There was no documentation of treatment or change. The patient was seen only twice by his FP between this hospital stay and his final admission.

About two years after this patient's last visit to his internist, he had right flank pain with radiation to the right groin. By 8:30 in the evening the pain became so intense that relief was absolutely necessary, and he reported to the emergency room (ER) of the hospital where both his FP and internist were on the medical

staff. History revealed some "tarry" stools, but he denied any urinary tract symptoms.

The ER physician's examination revealed temperature 97.2°F, respirations 20/min, pulse 88/min, and blood pressure 180/110 mm Hg. Medications being taken were recorded as Timoptic, Naprosyn, Zylprim, Corgard, Lasix, and Micro-K. About 30 minutes after the patient arrived the shift changed and another ER physician took over. Again, this doctor recorded the complaint of severe pain in the right flank radiating to the groin, with nausea but no vomiting. The patient told of three black stools the day of admission and hematuria two months earlier. He stated that his gout was in remission. Physical examination of the abdomen showed a mass in the right lower abdomen slightly below and lateral to the umbilicus. The bowel sounds were thought to be normal. Rectal examination revealed bright red blood at the os. Guaiac was 4+. The prostate was normal and the impression was probable right ureteral calculus. About one hour after his arrival in the ER the patient was given 1 mg Dilaudid. The blood pressure was recorded at 190/120 mm Hg. More narcotic was given, and an hour later the patient was asleep, with a blood pressure of 130/80 mm Hg. The laboratory reported WBC count 11,300/cu mm, RBC count 5,180,000/cu mm, hemoglobin 15.3 gm/dl, hematocrit 46.7%, platelets 308,000/cu mm. Urinalysis showed 2 to 5 RBC/HPF. KUB x-ray showed extensive degenerative changes in spine and right hip, and a normal gas pattern. No abnormal mass or calcification were seen.

The ER physician called the FP on call for the patient's doctor and discussed hospital admission. The patient was admitted about three hours after he came to the ER, with admission orders by the ER physician to "Notify Dr. (patient's physician) at 7 AM of patient's admission and room number. Notify Dr. (covering physician) of any changes in condition tonight. IVP in AM as soon as possible after 4 AM." Orders were written for the urine to be strained for stones, and for narcotics to control pain. The nurse's admission note stated: "New admit, no acute distress. Denies any urinary difficulty. Family states he has passed some bright red blood per rectum tonight." He required narcotics once during the early morning hours, but two hours later he was "calling out" in pain, needing more medi-

* Dr. Avery is Chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Co., Brentwood, TN. This article appeared in the *Journal of the Tennessee Medical Association* in March of 1993. It is reprinted here with permission.

cation. He complained of severe right groin pain radiating to the back. The IVP was done about 9 AM. The report indicated only and enlarged prostate. Otherwise the examination was normal.

When the patient returned from X-ray he was said to be cool and clammy. He denied pain but complained of "feeling bad." The blood pressure was measured at 184/112 mm Hg. The charge nurse was notified of the elevated blood pressure. The diaphoresis reported as following the injection of the dye subsided in about 30 minutes, but within 15 minutes the blood pressure was recorded at 210/120 mm Hg. The charge nurse called the doctor's office. She learned at that time that the answering service had not notified the attending FP at 7 AM as instructed. At 11 AM, the nurses were still waiting for a call from the FP. The blood pressure remained high. The internist who had previously seen the patient was on the floor and, on request of the nurses, ordered 20 mg of Procardia sublingually. In a short time the blood pressure was recorded at 158/90 mm Hg, and the internist would have seen the man but both the patient and his wife refused an examination by him. The family specifically requested another internist.

It was 3 PM when the attending FP came to the hospital to see his patient. His examination found the abdomen to be "very obese—bowel sounds normal—no tenderness of masses." At 5 PM the attending FP wrote an order for the requested internist to see the patient. Shortly afterward the requested internist examined the patient and ordered a stat CT of the abdomen with the presumptive diagnosis of a ruptured and leaking abdominal aortic aneurysm (AAA). Prior to this examination, the nurse's notes recorded: "Diaphoretic. Moist and clammy. Place in Trendelenburg." The blood pressure was not recorded this time, but one could assume that it was low. Volume expanders were ordered, and the patient was transferred to ICU.

At 5:15 PM the laboratory reported WBC count 17,200/cu mm, RBC count 4,740,000/cu mm, hemoglobin 14.3 gm/dl, and hematocrit 42.5%. The CT report indicated an aneurysm involving the lower abdominal aorta below the renal arteries measuring 5 cm in diameter and projecting toward the right. There appeared to be some "reaction" in the mesentery adjacent to the aneurysm. At about 6 PM, the internist examined the patient again and wrote as a progress note: "The BP is up to 110 systolic. There is a pulsating mass in the right lower abdomen. No bruits are heard and the abdomen is quiet." A vascular surgeon was consulted immediately.

At 8 PM blood work was reported as WBC count 10,000/cu mm, RBC count 2,780,000/cu mm, hemoglobin 8.4 gm/dl, hematocrit 25%, and platelets 212,000/cu mm. A note was written by the surgeon, timed by

him as 9 PM to 4 AM, describing the surgery for the ruptured AAA. Times recorded in the operating room (OR) show that the patient arrived in the OR at 8:45 PM. The anesthesiologist arrived 30 minutes later, and the surgeon did not begin the operation until about two hours after the patient got to the OR. Cardiac and renal complications in the postoperative period caused the patient's death.

A lawsuit was filed against four physicians: The FP, the surgeon, and the internist were all charged with delay in the diagnosis and treatment of this patient. Punitive damages were demanded for "willful and wanton negligence." The anesthesiologist was charged with causing cardiac failure and respiratory difficulty by injudicious administration of fluids during the surgery.

In the development of this case, the physicians pointed fingers at each other, making settlement much more difficult and expensive. Finally the surgeon bore the chief responsibility because of his delay in treating this severe emergency. The FP was charged with a significant amount of the settlement for his delay in seeing the patient after his admission to the hospital. A lesser part of the settlement was charged against the anesthesiologist.

Loss Prevention Comments

The standard of care in our profession demands that we put our patients first. In the case of both the FP and the surgeon, there were reasons at the time that seemed to mitigate the actions of each. In the aftermath of the death of the patient, these reasons were seen as excuses only and could in no way justify the FP's delay in seeing his patient for at least four hours after he learned of the man's admission, but about 12 hours after the actual admission. Although the surgeon said he was involved with another emergency, there could be no reason why another surgeon was not called if the first one was not immediately available. The surgeon's progress note was seen as an effort to hide the true facts of his delay. This surgeon had a reputation of holding on to patients at all costs rather than asking for help from his colleagues. There were no physicians willing to testify that he was within the standard of care in this case. The anesthesiologist, in retrospect, could have been severely criticized for the amount of fluid given during and immediately after the surgery.

In view of the very real chance of a "shock" verdict by a jury sympathetic to the patient's widow and his children and willing to "punish" the doctors for what they might well have believed to be careless and uncaring behavior toward a patient in a very real medical emergency, settlement of this suit was considered necessary.



Cardiology Commentary and Update

Debasis Das, M.D.*
Mark St. Pierre, M.D.*
J. David Talley, M.D.*

Peripartum Cardiomyopathy

Peripartum cardiomyopathy is a form of dilated cardiomyopathy that presents with signs and symptoms of congestive heart failure in the last month of pregnancy or within the first five months after delivery in the absence of known structural heart disease.¹ We recently had the opportunity to care for a patient with peripartum cardiomyopathy and review the pertinent features of this unusual condition.

Patient Report

A 33-year-old female became acutely dyspneic two days after delivering her first newborn. She was previously healthy and had an uncomplicated pregnancy. There was no family history of cardiac disease and her only medication was a prenatal multivitamin.

She was mildly obese in obvious respiratory distress. Her blood pressure was 110/70 mmHg. and heart rate was 110/minute. There was marked jugular venous distension. The cardiac examination was remarkable for a laterally displaced apical impulse, a S_3 gallop, and a grade 2/6 systolic murmur at the apex radiating to the axilla. Bibasilar crackles were present on chest examination.

The chest X-ray revealed moderate enlargement of the cardiac silhouette and pulmonary edema (Figure 1). A 12-lead electrocardiogram showed sinus tachycardia and non-specific T wave abnormality. With echocardiography, there was four-chamber dilation, mild mitral regurgitation, and global left ventricular hypokinesis with estimated ejection fraction of approximately 20%. No other valvular abnormality was identified.

A diagnosis of peripartum cardiomyopathy (Table 1) was made and she was aggressively treated with intravenous diuretics, digoxin, an angiotensin converting enzyme inhibitor, and warfarin. Her symptoms improved over the next week and she was discharged.

She was completely asymptomatic six months later and the medications were discontinued. Repeat echocardiography was preformed and showed a normal size left ventricle with normal systolic function (left ventricular ejection fraction approximately 60%). Considering the risk of a recurrence of her cardiomyopathy with a subsequent pregnancy, she has elected to have tubal ligation.

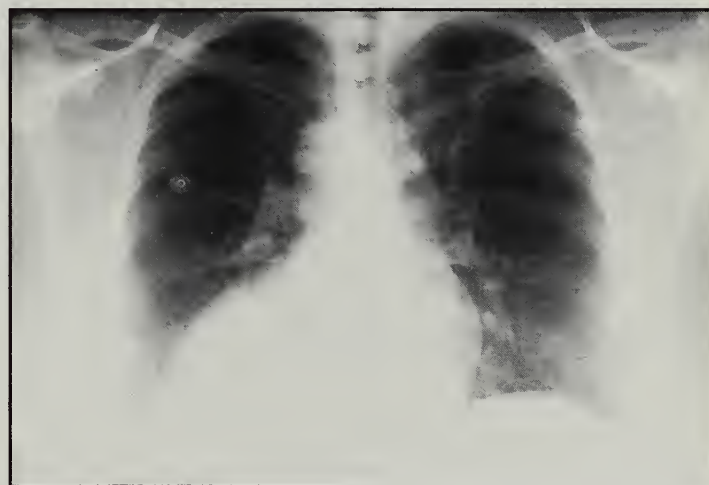


Figure 1: Chest X-ray revealed moderate enlargement of the cardiac silhouette and pulmonary edema.

Discussion

Question: How common is peripartum cardiomyopathy?

Answer: The true incidence is unknown, but it is unusual. Reported incidences vary widely, between 1 in 1300 and 1 in 15,000.

Question: What patients are at increased risk?

Answer: The identified risk factors are patients of African descent, age greater than 30 years, multiparity, twin pregnancy, a family history of peripartum cardiomyopathy and prolonged tocolytic therapy.²

* Drs. Das, St. Pierre and Talley are with the Division of Cardiology at UAMS.

Table 1: Peripartum Cardiomyopathy

Etiology:	unknown
Anatomy:	1. Echocardiogram → 4-chamber dilation 2. Echocardiogram 6 months later → normal chamber size
Physiology:	1. Congestive heart failure 2. Echocardiogram → mild mitral regurgitation, global left ventricular hypokinesis, estimated ejection fraction 20% 3. Echocardiogram 6 months later → ejection fraction 60%
Subjective:	severely compromised at presentation, now asymptomatic
Objective:	uncompromised

Question: What causes this condition?

Answer: The exact etiology is unknown. With histopathology, there is little to differentiate between peripartum cardiomyopathy and other forms of dilated cardiomyopathy. Some believe that this condition may merely be a variant of idiopathic dilated cardiomyopathy, which is expressed at a younger age and unmasked by the immunosuppression of pregnancy coupled with altered hemodynamics. However the natural courses of the two conditions are different. The most widely held view is that peripartum cardiomyopathy is due to myocarditis (either viral or autoimmune) which develops as a result of the immunosuppressed state of pregnancy. In fact, endomyocardial biopsy within a week of onset of symptoms in many patients reveals features of active myocarditis.³

Question: How do you diagnose this condition?

Answer: Most patients present within the first month post-partum with symptoms compatible with congestive heart failure including dyspnea, fatigue, palpitations, chest discomfort, and peripheral edema. Physical examination reveals signs of left or biventricular failure. Chest X-ray shows cardiac enlargement and evidence of pulmonary congestion or edema. The electrocardiography shows nonspecific repolarization abnormalities (ST segment and T wave) but may demonstrate complicating arrhythmias. As seen in our patient, all cardiac chambers are dilated and the left ventricular systolic function is markedly reduced with echocardiography. Echocardiography also excludes any valvular abnormalities. It is not necessary to perform endomyocardial biopsy.

Question: How do you manage this condition?

Answer: As in other congestive cardiomyopathies with systolic dysfunction, aggressive diuresis with institution of digoxin and afterload reducing agents are the mainstays of treatment. Angiotensin converting enzyme inhibitors should be avoided during pregnancy because of its teratogenicity. A combination of hydralazine and nitrates or amlodipine may be substituted. More severe or resistant cases might require the use of parenteral inotropes and use of intravenous nitroprusside. Because of a substantial risk of

complicating thromboembolism, heparin during pregnancy and chronic oral anticoagulation in the postpartum period is recommended. The results of immunosuppressive therapy are inconsistent and are controversial. Cardiac transplantation remains the only hope for resistant cases but a compatible donor may be difficult to identify since postpartum women tend to have higher panels of reactive antibodies from fetal antigen exposure. The use of an intra-aortic balloon pump and a left ventricular assist device may serve as a "bridge" to transplantation.

Question: What is the natural course of this disease?

Answer: Unlike idiopathic dilated cardiomyopathy, peripartum cardiomyopathy has a more favorable clinical outcome. More than 50% of patients achieve complete or near complete recovery of clinical status and cardiac function on aggressive medical management, usually within the first six months post partum.⁴ However, there is a high chance of recurrence in subsequent pregnancies, especially in those who have not completely recovered cardiac function prior to pregnancy, and fatality rate as high as 10% has been reported.⁵

Question: What recommendation should be made about future pregnancies?

Answer: Future pregnancies should be discouraged in in-patients with persistent cardiac dysfunction. Amongst means of contraception, the use of oral contraceptive pills might be hazardous because of increased inherent risk of thromboembolism in the presence of persistent heart failure. Even in those with complete recovery of resting left ventricular ejection fraction the contractile reserve remains decreased as evidenced by a dobutamine challenge test and patients should be informed that subsequent pregnancy might be at additional risk.⁶

References:

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State Health Watch

Information provided by the Arkansas Department of Health, Division of Epidemiology

Influenza Vaccine Update

The Advisory Committee on Immunization Practices (ACIP) recently published recommendations for the use of influenza vaccine for the 1998-99 influenza season.

Influenza vaccine is strongly recommended for any person aged ≥ 6 months who, because of age or underlying medical condition, is at increased risk for complications of influenza. Healthcare workers and others (including household members) in close contact with persons in high-risk groups also should be vaccinated. In addition, influenza vaccine may be administered to any person who wishes to reduce the chance of becoming infected with influenza.

The trivalent influenza vaccine prepared for the 1998-99 season will include A/Beijing/262/95-like (H1N1), A/Sydney/5/97-like (H3N2) and B/Beijing/184/93-like hemagglutinin antigens. For the B/Beijing/184/93-like antigen, U.S. manufacturers will use the antigenically equivalent strain B/Harbin/07/94 because of its growth properties.

Although the current influenza vaccine can contain one or more of the antigens administered in previous years, annual vaccination with the current vaccine is necessary because immunity declines during the year following vaccination. Because the 1998-99 vaccine differs from the 1997-98 vaccine, supplies of the 1997-98 vaccine should not be administered to provide protection for the 1998-99 influenza season.

Two doses administered at least 1 month apart may be required for satisfactory antibody responses among previously unvaccinated children aged ≤ 9 years; however, studies of vaccines similar to those being used currently have indicated little or no improvement in antibody response when a second dose is administered to adults during the same season.

The ACIP recommends that pregnant women who will be beyond the first trimester of pregnancy (≥ 14 weeks' gestation) during the influenza season be vaccinated. Pregnant women who have medical conditions that increase their risk for complications from influenza should be vaccinated before the influenza seasons-regardless of the stage of pregnancy.

Other groups at increased risk for influenza-related complications are: (1) persons aged ≥ 65 years (2) residents of nursing homes and other chronic-care facilities that house persons of any age who have chronic medical conditions (3) adults and children who have chronic disorders of the pulmonary or cardiovascular systems, including children with asthma (4) adults and children who have required medical follow-up or hospitalization during the previous year because of chronic metabolic diseases (including diabetes mellitus), renal dysfunction, hemoglobinopathies or immunosuppression (including immunosuppression caused by medications) (5) children and teenagers (aged 6 months to 18 years) who are receiving aspirin therapy and therefore might be at risk for developing Reye syndrome after influenza.

During recent decades, data on influenza vaccine immunogenicity and side effects have been obtained for intramuscularly administered vaccine. Because recent influenza vaccines have not been adequately evaluated when administered by other routes, the intramuscular route is recommended. Adults and older children should be vaccinated in the deltoid muscle and infants and young children in the anterolateral aspect of the thigh.

The optimal time for organized vaccination campaigns for persons in high-risk groups is usually the period from October through mid-November. However beginning each September (when vaccine for the upcoming influenza season becomes available) persons at high risk who are seen by healthcare providers for routine care or as a result of hospitalization should be offered influenza vaccine. Opportunities to vaccinate persons at high risk for complications of influenza should not be missed.

The Arkansas Department of Health (ADH) will be offering influenza vaccinations at all local health units beginning October 15.

Those desiring more information may call the ADH, Division of Communicable Disease/Immunizations at (501) 661-2169 during normal business hours.

Reported Cases of Selected Diseases in Arkansas Profile for July 1998

The three-month delay in the disease profile for a given month is designed to minimize any changes that may occur due to the effects of late reporting. The numbers in the table reflect the actual disease onset date, if known, rather than the date the disease was reported.

Disease Name	Total Reported Cases YTD 1998	Total Reported Cases YTD 1997	Total Reported Cases YTD 1996	Total Reported Cases 1997	Total Reported Cases 1996
Campylobacteriosis	95	91	130	175	241
Giardiasis	88	114	83	220	182
Salmonellosis	224	193	220	445	455
Shigellosis	125	128	56	273	176
Hepatitis A	61	149	299	223	500
Hepatitis B	53	58	56	106	93
Hepatitis C	2	4	4	5	7
Meningococcal Infections	24	25	27	38	35
Viral Meningitis	30	15	16	26	38
Ehrlichiosis	10	17	6	22	7
Lyme Disease	6	22	25	27	27
Rocky Mtn Spotted Fever	13	24	14	31	22
Tularemia	15	17	16	24	24
Measles	0	0	0	0	0
Mumps	1	1	1	3	1
Gonorrhea	1212	2835	2888	4388	5050
Syphilis	198	290	516	394	706
Pertussis	33	17	4	60	14
Tuberculosis	66	110	128	200	225

For a listing of reportable diseases in Arkansas,
call the Arkansas Department of Health, Division of Epidemiology, at (501) 661-2893.



Arkansas HIV/AIDS Report

July 12, 1998

Summary

The cumulative total of HIV cases is 4,110. Of that number, 2,481 meet the AIDS case definition.

For the month ending July 12 of this year, there were 87 new HIV and 60 new AIDS cases reported.

Of the 2,481 AIDS cases reported since 1983, 1210 (49%) have died of AIDS.

Statewide

Thirteen (15%) of the HIV cases reported this quarter are female. For the 12-month period beginning August 1997 and ending July 1998, a total of 83 (22%) females were reported to be HIV-infected. Of these 83 females, 45 (54%) are black, 34 (41%) are white, one (1%) is Hispanic and three (4%) are other or unknown.

During the same time frame, 232 AIDS cases were reported, yielding a statewide case rate of 9.9 per 100,000.

For more information

HIV/AIDS Statistics:

Mischelle Priebe, (501) 661-2323

HIV Services:

Claude Nesbit, (501) 661-2292

STD Statistics:

Mark Barnes, (501) 661-2137

Risk Factor Profile: Women

From 1983 through July 12 of this year, the cumulative number of HIV-positive persons is 4,110. Of that number, 768 (19%) are women. Nearly half (47%) of these women have converted to full blown AIDS.

Women of childbearing age (13-44) comprise 93% of all female HIV (not AIDS) cases reported. During the 1995-1997 period, 25% of all HIV (not AIDS) cases reported were among women in this age category, compared to 26% during the 1992-1994 period. The actual number of childbearing-age women reported from 1995 to 1997 increased 16% over the previous three year period.

Black women disproportionately affected

While only 16% of the females in Arkansas are black, 58% of the female HIV (not AIDS) and 52% of the female AIDS cases reported through 1997 are black. AIDS case rates among white and black females during 1997 were 2.2 and 8.0 per 100,000, respectively. These rates were more than three times higher among black females than among white females.

Infants exposed perinatally to HIV infection

From 1992 to 1997, a total of 132 infants were born to HIV-infected women in Arkansas. Of those 132

infants, 98 (74%) are black 31 (23%) are white and 3 (2%) are other races. More than three-fourths (76%) of the HIV-infected women who gave birth were heterosexual contacts to a person with known risk and 18% were injecting drug users.

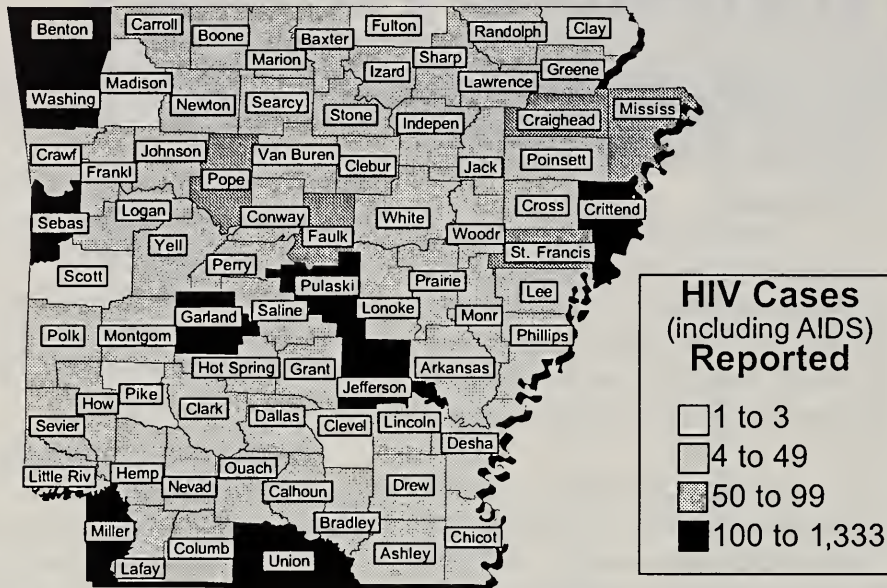
The HIV/AIDS surveillance program collects information on HIV-infected women who are pregnant and continues to monitor their infants' post-delivery progress. The majority of perinatally-exposed babies, as well as other pediatric HIV/AIDS patients, are monitored by Arkansas Children's Hospital in Little Rock.

Change in HIV Contact Policy

It is now our policy, without exception, that a PHI will contact the HIV infected person and investigate contacts of all newly reported cases of HIV. This new policy will allow maximization of disease transmission intervention, early discovery of newly infected persons (leading to early treatment), effective counseling and education to help prevent spread of the disease, and better epidemiological surveillance of the disease. Any questions can be directed to William F. Clardy, MD, MPH, Medical Director-Division of AIDS/STD, 501-661-2408, bclardy@mail.doh.state.ar.us.

HIV In Arkansas

Distribution Of Cases 1983 through July 12, 1998



Arkansas Department of Health HIV/AIDS Surveillance Program

Demographics	83-90	1991	1992	1993	1994	1995	1996	1997	1998	Total	%
Male	877	374	373	338	344	323	264	267	182	3342	81
Female	131	84	74	89	89	89	79	94	39	768	19
Under 5	12	8	5	3	5	2	1	9	1	46	1
5-12	7	1	0	0	0	1	0	0	0	9	0
13-19	29	18	25	11	21	11	21	19	6	161	4
20-24	155	43	48	59	58	44	29	38	19	493	12
25-29	249	100	99	106	80	73	59	54	37	857	21
30-34	233	114	106	89	93	97	84	76	41	933	23
35-39	161	86	63	75	69	80	70	66	59	729	18
40-44	81	47	39	45	48	46	35	49	27	417	10
45-49	41	19	25	16	27	22	18	33	13	214	5
50-54	15	14	14	10	10	17	14	8	11	113	3
55-59	13	3	12	6	6	6	6	6	3	61	1
60-64	3	2	6	5	9	7	1	2	2	37	1
65 and older	9	3	5	2	7	6	5	1	2	40	1
White	675	279	280	264	243	253	187	184	111	2476	60
Black	326	176	161	158	179	151	145	162	94	1552	38
Hispanic	2	3	4	1	7	3	5	5	6	37	1
Other/Unknown	5	0	2	4	4	5	6	10	10	45	1
Male/Male Sex Injection Drug User (IDU)	558	242	246	231	211	175	146	132	58	1999	49
Male/Male Sex + IDU	149	90	71	62	71	61	34	55	16	609	15
Heterosexual (Known Risk)	115	32	38	28	24	30	26	18	8	319	8
Transfusion	106	64	65	96	99	70	73	77	18	668	16
Perinatal	22	8	9	1	2	4	2	0	0	48	1
Hemophiliac	12	8	5	3	5	3	1	9	1	47	1
Undetermined	24	5	6	2	3	5	0	1	2	48	1
	22	9	7	4	18	64	61	69	118	372	9
TOTAL	1008	458	447	427	433	412	343	361	221	4110	100

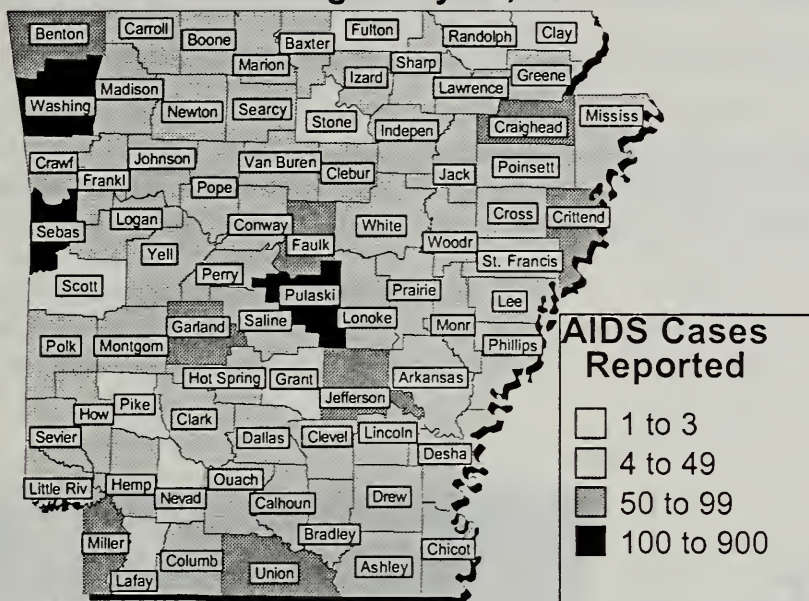
HIV Cases By County

County	1983-7/12/98	Aug 97-Jul 98
Arkansas	20	*
Ashley	19	0
Baxter	32	4
Benton	101	11
Boone	31	0
Bradley	16	*
Calhoun	8	0
Carroll	40	*
Chicot	19	0
Clark	22	5
Clay	*	0
Cleburne	16	*
Cleveland	*	0
Columbia	25	6
Conway	22	*
Craighead	78	10
Crawford	36	*
Crittenden	179	17
Cross	23	*
Dallas	9	*
Desha	20	*
Drew	14	*
Faulkner	63	*
Franklin	8	*
Fulton	*	0
Garland	154	21
Grant	4	*
Greene	22	0
Hempstead	24	*
Hot Spring	24	*
Howard	9	0
Independence	29	*
Izard	8	*
Jackson	10	0
Jefferson	172	12
Johnson	11	0
Lafayette	6	0
Lawrence	12	0
Lee	16	*
Lincoln	5	*
Little River	14	*
Logan	9	*
Lonoke	25	*
Madison	*	0
Marion	4	0
Miller	100	11
Mississippi	53	9
Monroe	16	*
Montgomery	7	*
Nevada	6	*
Newton	8	*
Ouachita	38	5
Perry	5	0
Phillips	45	5
Pike	3	0
Poinsett	16	*
Polk	12	0
Pope	58	*
Prairie	6	0
Pulaski	1362	107
Randolph	5	0
St. Francis	85	7
Saline	28	*
Scott	*	0
Searcy	5	0
Sebastian	221	12
Sevier	10	0
Sharp	10	0
Stone	5	*
Union	132	16
Van Buren	5	0
Washington	305	25
White	44	8
Woodruff	4	0
Yell	13	*
Prisons	128	25

* Case numbers of 1-3 are not reported.

AIDS In Arkansas

Distribution Of Cases 1983 through July 12, 1998



Arkansas Department of Health HIV/AIDS Surveillance Program

Demographics		83-90	1991	1992	1993	1994	1995	1996	1997	1998	Total	%
SEX	Male	393	171	244	325	253	237	213	181	107	2124	86
	Female	40	25	33	63	42	35	55	46	18	357	14
AGE	Under 5	8	6	2	2	1	2	0	8	1	30	1
	5-12	2	1	0	0	0	2	0	0	1	6	0
	13-19	4	3	2	4	3	1	3	2	1	24	1
	20-24	33	14	14	31	22	11	14	11	5	155	6
	25-29	99	42	65	78	45	46	46	29	12	463	19
	30-34	106	42	70	96	80	74	75	51	22	616	25
	35-39	85	37	56	77	52	49	54	55	40	505	20
	40-44	39	33	27	48	40	35	37	36	17	312	13
	45-49	26	6	22	26	22	17	21	20	13	173	7
	50-54	9	5	7	10	12	15	4	6	10	79	3
	55-59	9	4	8	8	5	6	7	4	1	52	2
	60-64	4	1	2	5	10	5	1	1	1	30	1
	65 and older	9	2	2	3	3	9	4	3	1	36	1
RACE	White	325	132	201	264	189	174	144	132	68	1630	66
	Black	103	63	72	120	103	95	116	88	49	811	33
	Hispanic	1	1	3	3	2	3	4	3	5	25	1
	Other/Unknown	4	0	1	1	1	0	2	3	3	15	1
RISK	Male/Male Sex	254	114	176	229	162	138	125	95	45	1338	54
	Injection Drug User (IDU)	44	29	41	68	47	48	28	44	16	365	15
	Male/Male Sex + IDU	68	21	27	29	25	27	24	10	8	239	10
	Heterosexual (Known Risk)	25	11	20	52	41	35	61	41	15	301	12
	Transfusion	20	8	5	1	4	4	3	0	0	45	2
	Perinatal	8	6	2	2	1	3	0	8	1	31	1
	Hemophiliac	7	5	4	5	6	7	1	0	2	37	1
	Undetermined	7	2	2	2	9	10	26	29	38	125	5
	TOTAL	433	196	277	388	295	272	268	227	125	2481	100

AIDS Cases By County

County	1983-7/12/98	Aug 97-Jul 98	Case Rate Per 100,000
Arkansas	8	0	0.0
Ashley	16	0	0.0
Baxter	23	*	3.2
Benton	79	6	6.2
Boone	24	0	0.0
Bradley	13	*	25.4
Calhoun	7	*	17.2
Carroll	24	*	5.4
Chicot	12	*	6.4
Clark	12	*	9.3
Clay	*	0	0.0
Cleburne	10	*	5.2
Cleveland	4	0	0.0
Columbia	17	*	7.8
Conway	15	*	5.2
Craighead	50	*	4.4
Crawford	29	*	7.1
Crittenden	94	12	24.0
Cross	12	*	5.2
Dallas	6	*	10.4
Desha	12	*	17.9
Drew	7	0	0.0
Faulkner	50	*	1.7
Franklin	6	*	13.4
Fulton	*	0	0.0
Garland	95	11	15.0
Grant	*	0	0.0
Greene	12	0	0.0
Hempstead	12	*	4.6
Hot Spring	18	*	7.7
Howard	6	0	0.0
Independence	18	*	9.6
Izard	8	*	26.4
Jackson	4	0	0.0
Jefferson	96	6	7.0
Johnson	7	0	0.0
Lafayette	*	*	10.4
Lawrence	12	*	5.7
Lee	10	*	15.3
Lincoln	8	4	29.2
Little River	7	*	14.3
Logan	9	*	9.7
Lonoke	23	*	2.5
Madison	4	0	0.0
Marion	4	0	0.0
Miller	57	8	20.8
Mississippi	21	4	7.0
Monroe	7	*	8.8
Montgomery	5	0	0.0
Nevada	*	0	0.0
Newton	4	*	13.0
Ouachita	23	*	6.5
Perry	4	0	0.0
Phillips	22	*	6.9
Pike	*	0	0.0
Poinsett	8	0	0.0
Polk	9	0	0.0
Pope	29	*	4.4
Prairie	7	*	10.5
Pulaski	828	82	23.5
Randolph	*	0	0.0
St. Francis	38	*	10.5
Saline	19	*	1.6
Scott	*	0	0.0
Searcy	5	0	0.0
Sebastian	139	12	12.0
Sevier	8	0	0.0
Sharp	8	0	0.0
Stone	*	0	0.0
Union	73	5	10.7
Van Buren	4	0	0.0
Washington	186	15	13.2
White	28	8	14.6
Woodruff	4	0	0.0
Yell	10	*	5.6
Prisons	32	0	0.0

* Case numbers of 1-3 are not reported.

Resolutions

Harold B. Hawley, M.D.

WHEREAS, the membership of the Pulaski County Medical Society is sincerely saddened by the recent death of an esteemed member, Harold B. Hawley, M.D.; and

WHEREAS, Dr. Hawley was a loyal member of this Society for over thirty-five years, always willing to work towards its betterment; and

WHEREAS, Dr. Hawley will long be remembered by his many friends and patients as a caring and competent physician;

BE IT THEREFORE RESOLVED:

THAT, this resolution be adopted and filed in the permanent files of the Society; and

THAT, a copy of this resolution be sent to Dr. Hawley's family as an expression of our heartfelt sympathy; and

THAT, a copy of this resolution be made available to *The Journal of the Arkansas Medical Society* for publication.

Adopted:

Board of Directors

August 19, 1998

By Order of the Memorials Committee

Fred O. Henker, III, M.D., Chairman

James W. Headstream, M.D.

Bruce E. Schratz, M.D.

Let Us Hear From You!



**You can now E-mail AMS
at the following addresses:**

Main address: ams@arkmed.org

Ken LaMastus: klamastus@arkmed.org

Lynn Zeno: zeno@arkmed.org

David Wroten: dwroten@arkmed.org

Kay Waldo: kwaldo@arkmed.org

Plus...

Visit our Web Site at:

<http://www.arkmed.org>

Arkansas Medical Society Publications

The AMS Membership Directory

A quick and easy guide to AMS physician members, the directory provides addresses, phone and fax numbers, specialties and E-mail addresses. Plus other health related information. The directories are printed each year in late July.

The directories are \$50 each. With a purchase of 2 to 10, \$45 each; 11 or more, \$35 each. (Note: All AMS members receive one free directory through the mail immediately after publication in August of each year.)

The AMS's Physician's Legal Guide

A compilation of state and federal laws affecting the practice of medicine in Arkansas, this guide is 170 pages on topics such as medical records, patient abandonment, medical board regulations, Antitrust Law, Workers' Compensation, & much more. The List Price is \$100.00. **AMS Member Price is \$70.00.**

The Journal of the Arkansas Medical Society

The Journal of the Arkansas Medical Society is published monthly. Every AMS member receives *The Journal* as part of their membership. Subscriptions are available for \$30.00 per year for domestic or \$40.00 for foreign.

Ordering Information:

Send a check or money order made payable to AMS in the amount of your purchase to: AMS, P.O. Box 55088, Little Rock, AR 72215-5088. Be sure to indicate which publication you are ordering and include the name and address of who and where to mail your order. Visa/MasterCard is accepted for payment of the membership directory and the legal guide, but not for journal subscriptions. For more information, call AMS at 501-224-8967.

New Members

HOT SPRINGS

Davis, Katrina Raquel, Obstetrics/Gynecology. Medical Education, University of Tennessee Center for Health Sciences, 1994. Residency, UAMS, 1998.

CONWAY

Gullic, Phillip Thomas, Obstetrics/Gynecology. Medical Education, UAMS, 1994. Internship/Residency, St. Louis University, 1995/1998. Board pending.

EL DORADO

Germann, Robert E., Neurosurgery. Medical Education, University of Bruxelles, Belgium, 1976. Residency, Albert Einstein College, 1982. Board certified.

FORT SMITH

Maxey H. Craig, Family Practice/Emergency Medicine. Medical Education, Louisiana State University School of Medicine, Shreveport, 1985. Internship/Residency, Louisiana State University Medical Center, 1986/1988. Board certified.

Russell, Roy Eugene, Family Practice. Medical Education, UAMS, 1990. Internship/Residency, UAMS, 1991/1993. Board certified.

HEBER SPRINGS

Lister, Dan G., General Surgery. Medical Education, UAMS, 1993. Internship/Residency, Marshall University, Huntington, West Virginia, 1994/1998.

JONESBORO

Dudley, Millicent, Psychiatry. Medical Education, Michigan State University, East Lansing, 1980. Internship/Residency, Henry Ford Hospital, Detroit, 1981/1984. Board Eligible.

LITTLE ROCK

Cooper, Keith Whittington, Family Practice. Medical Education, UAMS, 1995. Internship/Residency, UAMS, 1996/1998. Board pending.

Setter-Logan, Nona M., Family Practice. Medical Education, Meharry Medical College, Nashville, Tennessee, 1984. Board certified.

MOUNT IDA

Jackson, Charles Andrew, Family Practice. Medical Education, UAMS, 1995. Internship/Residency, AHEC Northeast, Jonesboro, 1996/1998. Board pending.

NORTH LITTLE ROCK

Delap, Susan Kaye, Infectious Diseases. Medical Education, UAMS, 1993. Internship/Residency, UAMS, 1994/1996. Board certified.

PINE BLUFF

Holaday, Lisa Marie, Internal Medicine. Medical Education, University of Texas Health Science Center, San Antonio, 1991. Internship/Residency, University of Texas Health Science Center, San Antonio, 1992/1994. Board certified.

Masood, Syed Kamil, Internal Medicine/Nephrology & Hypertension. Medical Education, Dow Medical College, Karachi, Pakistan, 1987. Internship/Residency, St. Vincent Medical Center, New York, 1995/1996. Board certified.

RESIDENTS

Aguinaga, Miguel G., General Surgery. Medical Education, University Autonoma De Madrid, Spain, 1983. Residency, Brooklyn Hospital Medical Center, New York, 1998. Fellowship, UAMS.

Ahmad, Ibrahim, Nephrology. Medical Education, Tishreem University, Latakia, Syria, 1992. Internship/Residency, University of Pittsburgh School of Medicine, Pennsylvania. Fellowship, UAMS.

Alam, Muhammad G., Internal Medicine. Medical Education, Punjab Medical College, Pakistan, 1990. Internship/Residency, Momouth Medical Center, Long Branch, New Jersey, 1995/1997. Fellowship, UAMS.

Bell, Kimbra Aria, Internal Medicine. Medical Education, Meharry Medical College, Nashville, Tennessee, 1996. Internship/Residency, UAMS.

Boger, Eve McDonald, Medicine/Pediatrics. Medical Education, UAMS, 1998. Residency, UAMS.

Boger, William Garland, Internal Medicine. Medical Education, UAMS, 1998. Residency, UAMS.

Burson, G. Timothy, Neurosurgery. Medical Education, UAMS, 1993. Internship/Residency, UAMS.

Cadle, Kimberly Lynne, Pediatrics. Medical Education, UAMS, 1997. Internship, UAMS, 1998.

Chrisman, Freddy Dwight, Medicine. Medical Education, UAMS, 1997. Internship/Residency, UAMS.

Cockrum, Holly D., Obstetrics/Gynecology. Medical Education, UAMS, 1998. Internship/Residency, UAMS.

Davis, Jonathan Loran, Internal Medicine. Medical Education, Texas Tech University School of Medicine, Lubbock, 1998. Residency, UAMS.

DeNeen, Andrea Esperanza, Internal Medicine. Medical Education, University of Texas Health Science

Center, San Antonio, 1997. Internship, UAMS.

Harvey, Shelly M., Pediatrics. Medical Education, University of Texas Southwestern Medical School, Dallas, 1997. Internship/Residency, UAMS.

Hudson, Stephen A., Orthopedic Surgery. Medical Education, Louisiana State University School of Medicine, New Orleans, 1996. Internship/Residency, UAMS.

Kazzaz, Nelly Y., Internal Medicine. Medical Education, University of Jordan, Amman, Jordan, 1995. Internship, UAMS.

Konis, George, Family Medicine. Medical Education, Ross University, Dominica, 1996. Internship, Capital Region Medical Center, Jefferson, Missouri, 1995. Residency, UAMS.

Ku, Tsun Sheng Neil, Medicine/Pediatrics. Medical Education, University of South Alabama School of Medicine, Mobile, 1998. Residency, UAMS.

McCall, Tyrone Lee, Internal Medicine/Ophthalmology. Medical Education, Oklahoma University Health Science Center, Oklahoma City, 1996. Internship, Baylor, Dallas, Texas, 1997. Residency, UAMS.

Queralt, Yvonne M., Radiology. Medical Education, University of Texas Medical Branch, Galveston, 1997. Internship, Brackenridge Hospital, Austin, Texas, 1998. Residency, UAMS.

Sadler, Jennifer M., Emergency Medicine. Medical Education, UAMS, 1998. Residency, UAMS.

Said, Sufyan, Internal Medicine. Medical Education, University of Jordan, Amman, Jordan, 1992. Residency, University of Missouri, St. Louis, 1997. Fellowship, UAMS.

Saltzman, Daniel Alan, General Surgery. Medical Education, University of Minnesota Medical School, Minneapolis, 1990. Internship/Residency, University of Minnesota, Minneapolis, 1991/1998. Fellowship, UAMS – Arkansas Children's Hospital.

Schad, Carla Jo, Pediatrics. Medical Education, University of Missouri School of Medicine, Columbia, 1998. Internship, UAMS – Arkansas Children's Hospital.

Zhang, Yue Hong, Family Medicine. Medical Education, Shanghai Second Medical University, China, 1988. Internship/Residency, UAMS.

STUDENTS

Stephanie Baggett
Jessica Leigh Beard
Barbara Rayfield Bess
Debasish Bhattacharyya
Nicole M. Bowen
Sidney Wayne Collins, Jr.

Laura Elizabeth Cupples
Jason Glenn Daily
Amy Lynne Darwin
William Wayne Davenport
April DeAnn Davidson
Heather Melissa Diemer
Kenneth Doyne Dill
Joshua M. Dopko
Mark Alan Dyer
Clinton E. Evans
Whit Goodwin
Jeffrey Brewer Graham
William Justin Hayes
Andrew Dunsmore Heinzelmann
Erica Leigh Henderson
Lance Brandon Henry
Kathy Jo Herrin
Brady G. Hesington
Bradley Reagan Hughes
Justin Bailey Hunt
Tanvir Hussain
Kristin A. Jarrard
David G. Jones
Melissa Rae Kaufman
William Brian Kendall
Ann-Marie Magre
Janell M. Markey
Brent C. McAnulty
William M. McDonnell
Susan Gunti McGeorge
Rodney Heath McCarver
Owen Lee Middleton
Caroline S. Miles
Derek Lee Morgan
Rachel Ann Nazaruk
Ralph Christopher Panek
Amy Carol Parnell
Ted Moore Perick
Kristi Lynn Qualls-Statler
Lisa S. Reynolds
James Leonard Russell
Jarret D. Sanders
Warren Burckhart Seiler III
Neilesh Kumar Shah
Garry L. Stewart
Robert Paul Svoboda
Gregg Louis Tarini
Tommy Wayne Wagner
Scott Walsh
Jonna G. Webb
Jonathan Doyle White

Things To Come

October 30 - 31, 1998

3rd Annual Fingers to Toes: *Comprehensive Orthopaedic Review Course for Primary Care Physicians.* Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

November 6 - 7, 1998

Minimally Invasive Surgery at the Millennium. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Institute for Minimally Invasive Surgery and the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

November 15 - 19, 1998

American Public Health Association: *126th Annual Meeting and Exposition.* Washington D.C. Sponsored by the American Public Health Association. For more information, call 202-789-5620.

December 12, 1998

Contemporary Management of Acute Myocardial Infarction. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

Arkansas Foundation for Medical Care Quarterly Video Conference:

Video conference

Time: 12 noon to 1:30 p.m.

Date: November 19.

Location: UAMS education building/AHECs
and Rural Hospital Affiliates

For more information,
contact Patricia Williams or Cindy Jones
at 501-649-8501, ext. 203.

April 23 - 24, 1999

Oncology in the New Millennium. The Ritz-Carlton Hotel, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

April 23 - 30, 1999

58th Annual American Occupational Health Conference. Ernest N. Morial Convention Center, New Orleans, Louisiana. Sponsored by the American College of Occupational and Environmental Medicine. For more information, call 847-228-6850 extension 180; FAX: 847-228-1856; Internet: <http://www.acoem.org>

Arkansas Medical Society Activities

October 23-24, 1998

CME in Eureka Springs
Joint sponsored by UAMS
Basin Park Hotel

October 28-29, 1998

Advanced CPT & ICD-9-CM Coding
Riverfront Hilton
North Little Rock

November 21-22, 1998

1998 AMS Fall Meeting
Red Apple Inn
Heber Springs



For more information,
Call the AMS office at:
1-800-542-1058
or 501-224-8967

Keeping Up

October 22 - 25, 1998

Western Extracorporeal Membrane Oxygenation Conference - Excelsior Hotel, Little Rock. Sponsored by UAMS College of Medicine. For more information, call (501) 320-1248.

October 27, 1998

Diabetes Update - St. Joseph's Regional Health Center Mercy Room, Hot Springs. Sponsored by St. Joseph's Regional Health Ctr. For more information, call (501) 622-1024.

November 3, 1998

Head and Neck Cancer - North Arkansas Regional Medical Center Conference Room, Harrison. Time: Noon. Sponsored by North Arkansas Regional Medical Center. For more information, call 870-365-2098.

November 6, 1998

Baptist Heart Center Update - Baptist Medical Center, J.A. Gilbreath Conference Center, Little Rock. Sponsored by Baptist Medical Center. For information, call (501) 202-2673.

November 6 - 7, 1998

The Dennis Lucy Neurology Symposium - Fairfield Bay Conference Center, Fairfield Bay. Sponsored by UAMS College of Medicine - Department of Neurology. For more information, call (501) 661-7962.

November 10, 1998

Plavix-Antiplatelet Therapy - St. Joseph's Regional Health Center Mercy Room, Hot Springs. Sponsored by St. Joseph's Regional Health Ctr. For more information, call (501) 622-1024.

November 12 - 13, 1998

Fifteenth Annual Conference on Perinatal Care - Riverfront Hilton, North Little Rock. Sponsored by UAMS College of Medicine - Department of OB/GYN. For more information, call (501) 661-7962.

November 13, 1998

Eighth Annual Professional Development Day - Arkansas Children's Hospital, Brandon Conference Center. Sponsored by UAMS College of Medicine. For more information, call (501) 661-7962.

Recurring Education Programs

The following organizations are accredited by the Arkansas Medical Society to sponsor continuing medical education for physicians. The organizations named designate these continuing medical education activities for the credit hours specified in Category 1 of the Physician's Recognition Award of the American Medical Association.

FAYETTEVILLE-VA MEDICAL CENTER

Medical Grand Rounds/General Medical Topics, Thursdays, 12:00 noon, Auditorium, Bldg. 3

FAYETTEVILLE-WASHINGTON REGIONAL MEDICAL CENTER

Chest Conference, 1st Wednesday of every month, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Grand Rounds Conference, 3rd Wednesday of every month, 7:30 - 8:30 a.m., Baker Conference Center, breakfast provided.
Primary Care Conferences, every Monday, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Tumor Conference, every Thursday, 7:30 - 8:30 a.m., WRMC, Baker Conference Center, no fee, breakfast provided

HARRISON-NORTH ARKANSAS MEDICAL CENTER

Cancer Conference, October 22, November 3, and December 22, 12:00 noon, Conference Room

HOT SPRINGS-ST. JOSEPH'S REGIONAL HEALTH CENTER

Cancer Conference, every Monday, 12:15 p.m., St. Joseph's Mercy Room.
Chest Conference, Quarterly on last Tuesday of month beginning November 24, 12:15 p.m., St. Joseph's Mercy Room.
Grand Rounds, 2nd Tuesday each month, 12:00 noon, St. Joseph's Mercy Room. Lunch provided.
Medicine Not So Grand Rounds, dates vary, 12:15 p.m., St. Joseph's Mercy Room.

LITTLE ROCK-ST. VINCENT INFIRMARY MEDICAL CENTER

Cancer Conferences, Thursdays, 12:00 noon, Southwestern Bell/Arkla room. Lunch provided.
General Surgery Grand Rounds, 1st Thursday, 7:00 a.m. Southwestern Bell/Arkla Room. Light breakfast provided.
Interdisciplinary AIDS Conference, 2nd Friday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Journal Club, Tuesdays, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Pulmonary Conference, 4th Wednesday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.

LITTLE ROCK-BAPTIST MEDICAL CENTER

Breast Conference, 3rd Thursday, 7:00 a.m., J.A. Gilbreath Conference Center
Gastroenterology/Surgery Journal Club, dates vary, AR Gastroenterology Memorial Medical Plaza, Suite 3A. Call 501- 202-2673 or 202-3888 for more information.
Grand Rounds Conference, Wednesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Pulmonary Conference, Tuesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Sleep Disorders Case Conference, dates vary, 12:00 noon. Call 202-2673 for date and location. Lunch provided.

MOUNTAIN HOME-BAXTER COUNTY REGIONAL HOSPITAL

Lecture Series, 3rd Tuesday, 6:30 p.m., Education Building
Tumor Conference, Tuesdays, 12:00 noon, Carti Boardroom

The University of Arkansas College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor the following continuing medical education activities for physicians. The Office of Continuing Medical Education designates that these activities meet the criteria for credit hours in category 1 toward the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

LITTLE ROCK-ARKANSAS CHILDREN'S HOSPITAL

Faculty Resident Seminar, 3rd Thursday, 12:00 noon, Sturgis Auditorium
Genetics Conference, Wednesdays, 1:30 p.m., Conference Room, Springer Building
Infectious Disease Conference, 2nd Wednesday, 12:00 noon, 2nd Floor Classroom
Pediatric Grand Rounds, Tuesdays, 8:00 a.m., Sturgis Bldg., Auditorium
Pediatric Neuroscience Conference, 1st Thursday, 8:00 a.m., 2nd Floor Classroom
Pediatric Pharmacology Conference, 5th Wednesday, 12:00 noon, 2nd Classroom
Pediatric Research Conference, 1st Thursday, 12:00 noon, 2nd Floor Classroom

LITTLE ROCK-UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

ACRC Multi-Disciplinary Cancer Conference (Tumor Board), Wednesdays, 12:00 noon, ACRC 2nd floor Conference Room.
Anesthesia Grand Rounds/M&M Conference, Tuesdays, 6:00 a.m., UAMS Education III Bldg., Room 0219.
Autopsy Pathology Conference, Wednesdays, 8:30 a.m., VAMC-LR Autopsy Room.
Cardiology-Cardiovascular & Thoracic Surgery Conference, Wednesdays, 11:45 a.m., UAMS, Shorey Bldg., room 3S/06
Cardiology Grand Rounds, 2nd & 4th Mondays, 4:00 p.m., UAMS Shorey Bldg., 3S/06
Cardiology Morning Report, every morning, 7:30 a.m., UAMS, Shorey Bldg. room 3S/07
Cardiothoracic Surgery M&M Conference, 2nd Saturday each month, 8:00 a.m., UAMS, Shorey Bldg. room 2S/08
CARTI/Searcy Tumor Board Conference, 2nd Wednesday, 12:30 p.m., CARTI Searcy, 405 Rodgers Drive, Searcy.
Centers for Mental Healthcare Research Conference, 1st & 3rd Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research
CORE Research Conference, 2nd & 4th Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research
Endocrinology Grand Rounds, Fridays, 12:00 noon, ACRC Bldg., Sam Walton Auditorium, 10th floor
Gastroenterology Grand Rounds, Thursdays, 4:00 p.m., UAMS Hospital, room 3D29 (1st Thurs. at ACH)
Gastroenterology Pathology Conference, 4:00 p.m., 1st Tuesday each month, UAMS Hospital
GI/Radiology Conference, Tuesdays, 8:00 a.m., UAMS Hospital, room 3D29
In-Vitro Fertilization Case Conference, 2nd & 4th Wednesdays each month, 11:00 a.m., Freeway Medical Tower, Suite 502 Conf. rm
Medical/Surgical Chest Conference, each Monday, 4:00 p.m., UAMS Hospital, room M1/293
Medicine Grand Rounds, Thursdays, 12:00 noon, UAMS Education II Bldg., room 0131
Medicine Research Conference, one Wednesday each month, 4:30 p.m. UAMS Education II Bldg. room 0131A
Neuropathology Conference, 2nd Wednesday each month, 4:00 p.m., AR State Crime Lab, Medical Examiner's Office
Neurosurgery, Neuroradiology & Neuropathology Case Presentations, Thursdays, 4:00 p.m., UAMS Hospital
OB/GYN Fetal Boards, 2nd Fridays, 8:00 a.m., ACH Sturgis Bldg.
OB/GYN Grand Rounds, Wednesdays, 7:45 a.m., UAMS Education II Bldg., room 0141A
Ophthalmology Problem Case Conference, Thursdays, 4:00 p.m., UAMS Jones Eye Institute, 2 credit hours
Orthopaedic Basic Science Conference, Tuesdays, 7:30 a.m., UAMS Education II Bldg., room B/107
Orthopaedic Bibliography Conference, Tuesdays, Jan. - Oct., 7:30 a.m., UAMS Education II Bldg.
Orthopaedic Fracture Conference, Tuesdays, 9:00 a.m., UAMS Education II Bldg., room B/107
Orthopaedic Grand Rounds, Tuesdays, 10:00 a.m., UAMS Education II Bldg., room B/107
Otolaryngology Grand Rounds, 2nd Saturday each month, 9:00 a.m., UAMS Biomedical Research Bldg., room 205
Otolaryngology M&M Conference, each Monday, 5:30 p.m., UAMS Otolaryngology Conf. room
Perinatal Care Grand Rounds, every Tuesday, 12:15 p.m., BMC, 2nd floor Conf. room
Psychiatry Grand Rounds, Fridays, 11:00 a.m., UAMS Child Study Center Auditorium
Surgery Grand Rounds, Tuesdays, 8:00 a.m., ACRC Betsy Blass Conf.
Surgery Morbidity & Mortality Conference, Tuesdays, 7:00 a.m., ACRC Betsy Blass conference room, 2nd floor
NLRVA Geriatric/Medicine Grand Rounds, Thursdays, 8:00 a.m., VAMC-NLR, Bldg 68, room 130
VA Medical Service Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D109
VA Pathology-Hematology/Oncology-Radiology Patient Problem Conference, Thursdays, 8:15 a.m., VAMC-LR, room 2E142
VA Psychiatry Difficult Case Conference, 4th Monday, 12:00 noon, VAMC-NLR, Mental Health Clinic
VA Lung Cancer Conference, Thursdays, 3:00 p.m., VAMC-LR, room 2E142
VA Medical Service Teaching Conference, Thursdays, 8:00 a.m., VAMC-NLR, Bldg. 68 room 130
VA Medicine-Pathology Conference, Tuesday, 2:00 p.m., VAMC-LR, room 2D109
VA Medicine Resident's Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D08
VA Physical Medicine & Rehab Grand Rounds, 4th Friday, 11:30 a.m., VAMC-NLR Bldg. 68, room 118 or Baptist Rehab Institute
VA Surgery Grand Rounds, Thursdays, 12:45 p.m., VAMC-LR, room 2D109, 1.25 credit hours
VA Topics in Rehabilitation Medicine Conference, 2nd, 3rd, & 4th Thursdays, 8:00 a.m., VAMC-NLR Bldg. 68, room 118
VA Weekly Cancer Conference, Monday, 3:00 p.m., VAMC-LR, room 2E-142
White County Memorial Hospital Medical Staff Program, once monthly, dates & times vary, White County Memorial Hospital, Searcy

EL DORADO-AHEC

Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., Warner Brown Campus, 6th floor Conf. Rm.
Behavioral Sciences Conference, 1st & 4th Friday, 12:15 p.m., AHEC - South Arkansas

Chest Conference, 3rd Wednesday, 12:15 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.
Dermatology Conference, 1st Tuesdays and 1st Thursdays, AHEC - South Arkansas
GYN Conference, 2nd Friday, 12:15 p.m., AHEC-South Arkansas
Internal Medicine Conference, 1st, 2nd & 4th Wednesday, 12:15 p.m., AHEC-South Arkansas
Noon Lecture Series, 2nd & 4th Thursday, 12:00 noon, Union Medical Campus, Conf. Rm. #3. Lunch provided.
Obstetrics-Gynecology Conference, 4th Thursday, 12:15 p.m., AHEC - South Arkansas
Pathology Conference, 2nd Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5. Lunch provided.
Pediatric Conference, 3rd Friday, 12:15 p.m., AHEC - South Arkansas
Pediatric Case Presentation, 3rd Tuesday, 3rd Friday, AHEC - South Arkansas
Surgical Conference, 1st, 2nd & 3rd Monday, 12:15 p.m., AHEC - South Arkansas
Tumor Clinic, 4th Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5, Lunch provided.
VA Hematology/Oncology Conference, Thursdays, 8:15 a.m., VAMC-LR Pathology conference room 2E142

FAYETTEVILLE-AHEC NORTHWEST

AHEC Teaching Conferences, Tuesdays & Wednesdays, 12:00 noon, AHEC Classroom
AHEC Teaching Conferences, Fridays, 12:00 noon, AHEC Classroom
AHEC Teaching Conferences, Thursdays, 7:30 a.m., AHEC Classroom
Medical/Surgical Conference Series, 4th Tuesday, 12:30, Bates Medical Center, Bentonville

FORT SMITH-AHEC

Grand Rounds, 12:00 noon, 1st Wednesday of each month, Sparks Regional Medical Center
Neuroradiology Conference, 1st Tuesday of each month, 12:00 noon, Sparks Regional Medical Center, 7th floor dining room
Neuroscience & Spine Conference, 3rd Wednesday each month, 12:00 noon, St. Edward Mercy Medical Center
Tumor Conference, Mondays, 12:00 noon, St. Edward Mercy Medical Center
Tumor Conference, Wednesdays, 12:00 noon, Sparks Regional Medical Center

JONESBORO-AHEC NORTHEAST

AHEC Lecture Series, 1st & 3rd Tuesday, 12:00 noon, Stroud Hall, St. Bernard's Regional Medical Center. Lunch provided.
Arkansas Methodist Hospital CME Conference, 7:30 a.m., Hospital Cafeteria, Arkansas Methodist Hospital, Paragould
Chest Conference, 2nd Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Citywide Cardiology Conference, 3rd Thursday, 7:30 p.m., Jonesboro Holiday Inn
Clinical Faculty Conference, 5th Tuesday, St. Bernard's Regional Medical Center, Dietary Conference Room, lunch provided
Craighead/Poinsett Medical Society, 1st Tuesday, 7:00 p.m. Jonesboro Country Club
Greenleaf Hospital CME Conference, monthly, 12:00 noon, Greenleaf Hospital Conference Room. Lunch provided.
Independence County Medical Society, 2nd Tuesday, 6:30 p.m., Batesville Country Club, Batesville
Interesting Case Conference, 4th Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Jackson County Medical Society, 3rd Thursday, 7:00 p.m., Newport Country Club, Newport
Kennett CME Conference, 3rd Monday, 12:00 noon, Twin Rivers Hospital Cafeteria, Kennett, MO
Methodist Hospital of Jonesboro Cardiology Conference, every other month, 7:00 p.m., alternating between Methodist Hospital Conference Room and St. Bernard's, Stroud Hall. Meal provided.
Methodist Hospital of Jonesboro CME Conference, 2nd Tuesday, 7:00 p.m., Cafeteria, Methodist Hospital of Jonesboro
Neuroscience Conference, 3rd Monday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch Provided.
Orthopedic Case Conferences, every other month beginning in January, 7:30 a.m., Northeast Arkansas Rehabilitation Hospital
Perinatal Conference, 2nd Wednesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Piggott CME Conference, 3rd Thursday, 6:00 p.m., Piggott Hospital. Meal provided.
Pocahontas CME Conference, 3rd Wednesday, 12:00 noon & 7:30 p.m., Randolph County Medical Center Boardroom
Tumor Conference, Thursdays, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Walnut Ridge CME Conference, 3rd & last Tuesday, 12:00 noon, Lawrence Memorial Hospital Cafeteria
White River CME Conference, 3rd Thursday, 12:00 noon, White River Medical Center Hospital Boardroom

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Behavioral Science Conference, 1st & 3rd Thursday, 12:00 noon, Jefferson Regional Medical Center
Chest Conference, 2nd & 4th Friday, 12:00 noon, Jefferson Regional Medical Center
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Tumor Conference, 1st Wednesday & 3rd Friday, 12:00 noon, Jefferson Regional Medical Center

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Residency Noon Conference, Monday, Wednesday, Thursday, Friday each week, alternates between St. Michael Health Care Center & Wadley Regional Medical Center

Tumor Board, Fridays, except 5th Friday, 12:00 noon, Wadley Regional Medical Center & St. Michael Hospital

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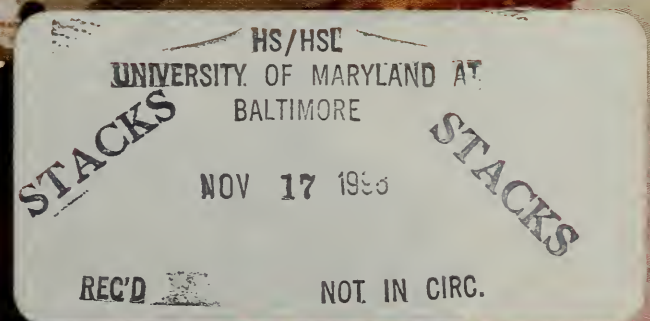
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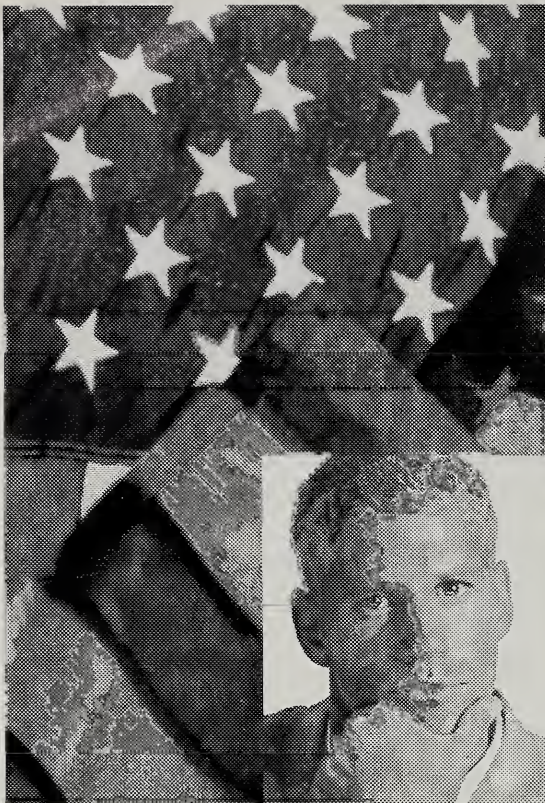
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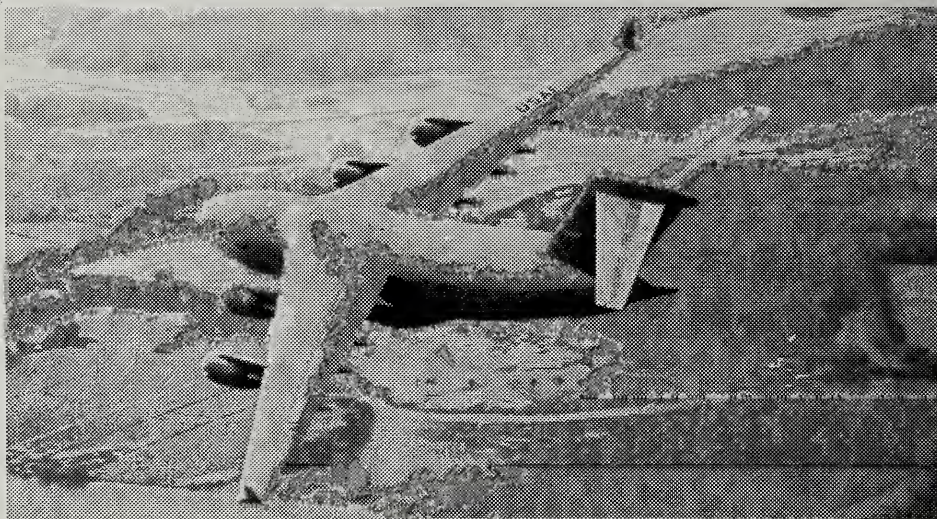
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*Award-Winning Journal of the Arkansas Medical Society
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Noncardiac Chest Pain

What I Didn't Learn in Medical School

Vickie Henderson, M.D.*

Mrs. J. was a 32-year-old woman from somewhere on the Indian Continent. She had ovarian cancer, two beautiful dark-eyed children and an adoring husband. She spoke a different language, had a different religion and culture, and dressed very differently from me. I was an exhausted fourth year resident on the GYN oncology service, a wife, the mother of two blonde-haired children, born and raised in Arkansas, a Protestant Christian and dressed in scrubs almost 24 hours a day. Mrs. J. had been debulked and incompletely staged in some other country and was now a regular patient on the GYN oncology service for chemotherapy. Her prognosis was poor. On this particular admission she had developed chest pain. Knowing that cancer patients can develop dysfunction of any body system, I began the work-up for chest pain.

By the end of the day, I had no idea why Mrs. J. had chest pain. Having checked and double checked every test result, I headed for the parking lot. It was almost midnight, and I nearly made it out the door before my attending paged me. He wanted the details of the work up. ABG's – normal; Chest x-ray – negative; Electrocardiogram – Normal, normal sinus rhythm; Complete blood count, electrolytes, Liver function tests – all within normal limits.

After giving my report, he wanted to know why I thought she had chest pain. I confessed my ignorance. "Go talk to her," he said. I groaned, it was late, I was tired, and I had already ruled out anything serious.

He told me to go sit on her bed and find out what's going on with her and how she's feeling.

That night, across language and cultural barriers, I discovered what I already knew in my heart. She was grieving for the husband she would leave behind and the children she would never see grow up. I imagine that causes pretty severe chest pain, the kind that

doesn't show up on expensive medical tests.

My encounter with this woman taught me a lot about medicine that I didn't learn in medical school. It taught me that sometimes a listening ear and reassurance have more power to heal than any pharmaceutical agent. It also taught me that fear, love, pain and family are universal and cross cultural and language barriers.

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* Dr. Henderson, a member of the editorial board for *The Journal of the Arkansas Medical Society*, is a specialist in obstetrics/gynecology with the Millard-Henry Clinic in Russellville.



Exhibit A:

Adhesive bandage, which plaintiff alleges defendant pulled rapidly from skin, violently tearing three hairs from plaintiff's arm, which resulted in severe shock, trauma, disfigurement, chronic debilitating pain and permanent psychological damage.

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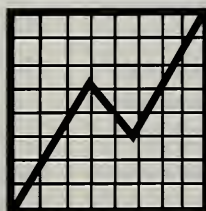
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Health Care Access Foundation

As of October 1, 1998, the Arkansas Health Care Access Foundation has provided free medical service to 14,536 medically indigent persons, received 27,564 applications and enrolled 53,687 persons. This program has 1,931 volunteer health care professionals including medical doctors, dentists, hospitals, home health agencies and pharmacists. These providers have rendered free treatment in 69 of the 75 counties.

Prostatitis is a Common Problem that is often Treated Unnecessarily with Antibiotics

Doctors see about 2 million men each year for prostatitis (infection or inflammation of the prostate gland). Many of these men leave the doctor's office with a prescription for antibiotics that are of uncertain benefit. For instance, one study has shown that only 10 percent of prostatitis is caused by bacteria and therefore would be treatable by antibiotics. Primary care physicians (PCPs) are more likely than urologists to prescribe antibiotics for prostatitis, according to a national survey by the Prostate Patient Outcomes Research Team (PORT), which is supported by the Agency for Health Care Policy and Research (HS08397 and HS07892).

Led by Mary McNaughton Collins, M.D., M.P.H. of Massachusetts General Hospital, the researchers used a national data base to analyze 58,955 visits to physicians for genitourinary symptoms or prostatitis by men 18 years of age or older from 1990 to 1994. Analysis revealed that 5 percent of all outpatient visits by these men were for genitourinary symptoms. In almost 2 million visits each year, prostatitis was listed as a diagnosis, with 46 percent of these visits to urologists and 47 percent to PCPs. The odds of a prostatitis diagnosis were about two-fold greater in the South than in the Northeast. Prostatitis was more commonly diagnosed in men aged 36 to 65 than in younger men.

Antibiotics were prescribed for 45 percent of men diagnosed with prostatitis with genitourinary symptoms and for 27 percent of men without genitourinary symptoms. Also, visits to PCPs were more often associated with antibiotic use than visits to urologists. These varied approaches to prostatitis treatment partially reflect that a specific treatment has yet to be convincingly proved effective in controlled trials or uniformly accepted as the treatment of choice. Ongoing research on the pathophysiology of chronic prostatitis will provide a stronger rationale for some treatments than others, concludes Dr. Collins.

For more information, see "How common is prostatitis? A national survey of physician visits," by Dr. Collins, Randall S. Stafford, M.D., Ph.D., Michael P. O'Leary, M.D., M.P.H., and Michael J. Barry, M.D., in the April 1998 *Journal of Urology* 159, pp. 1224-1228.

Information provided by the Agency for Health Care Policy and Research Newsletter, "AHCPR Research Activities," Number 218, August 1998.

Chlamydia Screenings: Should They Be Twice Yearly for High-Risk Girls?

Most primary-care algorithms call for yearly screening of sexually active adolescent girls, but this Baltimore study suggests that more frequent screening may be in order.

A cohort of 3,202 inner-city girls aged 12 to 19 made 5,360 visits to school and public health clinics over a three-year period. Only about 20% of visits were for STD symptoms. PCR screening of cervical mucus or urine revealed that 29% of girls tested positive at least once for chlamydia; incidence was 28 cases per 100 person-months of observation. The median time to diagnosis of a first infection was about 7 months; median time to recurrence was about 6 months. Standard STD predictors, including current STD symptoms, STD history, and failure to use condoms did not independently identify a subset of girls at high risk for infection.

Comment: In a high-prevalence community, screening sexually active teenage girls for chlamydia every 6 months instead of every 12 may be important both for patient care and STD control. Although the urine PCR testing used in this study is not yet FDA approved for women, an analogous urine DNA-amplification test called the LCR is approved, and may be a good noninvasive tool (see *JW* Feb 15 1998, p. 35 and *Arch Pediatr Adolesc Med* 1998; 152:52).
-A Zuger

Burstein GR et al. Incident Chlamydia trachomatis infections among inner-city adolescent females. JAMA 1998 Aug 12; 280:521-6

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An External Device for Female Urinary Incontinence

Urinary incontinence is a significant problem for as many as 30% of women. It is currently recommended that women with incontinence be treated conservatively before surgery is attempted, even for genuine

stress incontinence. This company-supported trial evaluated the efficacy, of Fem-Assist, one of two currently available, FDA-approved, reusable, silicone domed caps that fit over the external urethral meatus and are held in place by suction.

The study enrolled 155 women with urinary incontinence; 96 (62%) completed the protocol. During one month of using the device, stress incontinence, urgency, and urge incontinence scores on visual analog scales of symptom severity were significantly improved, but the irritation and discomfort score also rose significantly. According to diary data, 44% (38 of 86) of patients were totally dry and 72% of patient days were dry. Quality of life improved significantly for women completing the study, as judged from their responses to two objective questionnaires. Thirty-nine percent of patients chose to continue using the device.

Comment: Reusable, soft silicone devices that occlude the external urethral meatus should be added to other forms of conservative therapy (including biofeedback and medical therapy) for incontinence in women. However, because users of the device frequently complain of vulvar irritation and relatively few continue to use it, surgery remains the final management option. – *RW Rebar*

Versi E et al. A new external urethral occlusive device for female urinary incontinence. Obstet Gynecol 1998 Aug; 92:286-91.

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Do All Patients with Small Distal Polyps Need Colonoscopy?

A finding of polyps during flexible sigmoidoscopy usually results in referral for colonoscopy to look for proximal lesions. To assess the yield of this practice, investigators studied 4,490 asymptomatic patients undergoing screening for colorectal cancer. Patients were older than 50 and had negative fecal occult blood tests and no colon cancer risk factors.

Flexible sigmoidoscopy revealed neoplastic polyps, mostly tubular adenomas, in 401 patients. Of the 301 who then underwent colonoscopy, 76 had a proximal polyp and 13 had advanced proximal polyps (that is, polyps larger than 10 mm in diameter or tubulovillous, villous, or cancerous). Of 211 patients with multiple small (1 to 5 mm) tubular adenomas, any tubular adenoma 6 to 10 mm in diameter, or advanced polyps at sigmoidoscopy, 13 (6%) had advanced proximal polyps at colonoscopy. In contrast, none of 90 patients with a single small tubular adenoma at sigmoidoscopy had advanced proximal polyps at colonoscopy.

Comment: The 95% confidence interval ranged from 0% to 4% for the finding of no advanced polyps in patients with single small adenomas. Furthermore,

one quarter of patients with distal neoplasia refused colonoscopy. Nevertheless, if confirmed in larger numbers of patients, the study suggests that colonoscopy may be a very low-yield examination in patients with single small adenomas found by screening flexible sigmoidoscopy. – *R Saitz*

Wallace MB et al. Is colonoscopy indicated for small adenomas found by screening flexible sigmoidoscopy? Ann Intern Med 1998 Aug 15; 129:273-8.

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NASA Research Helping in the Fight Against Cancer

In our lifetimes, half of all men and one-third of all women will develop cancer, according to the American Cancer Society. To aid medical researchers combat these odds, NASA sponsors both space and ground-based research to better understand, and win, the fight against cancer.

Sponsored by NASA's Microgravity Research Program at the Marshall Space Flight Center in Huntsville, Ala., biomedical and biotechnology research conducted aboard orbiting spacecraft and in ground-based laboratories is leading to a better understanding of cancer and new innovative treatments. Advances in space technology have led the way for new treatment techniques for removal of children's brain tumors, a new skin cancer drug and improved understanding of women's breast cancer.

October was Breast Cancer Awareness month. This year, nearly 180,000 women in the United States will be diagnosed with breast cancer. One-fourth of these women will die, according to the American Cancer Society.

As part of the continued effort to understand and defeat cancer, several cancer research experiments are scheduled aboard Space Shuttle Discovery's STS-95 mission which as of the date of the journal printing was scheduled to launch October 29. Following are some of those investigations, as well as other NASA-sponsored cancer research projects:

Tissue Cell Growth Holds Keys To Better Cancer Treatments (STS-95 mission): Researchers grow live cells in space in rotating cylinders -- called bioreactors -- for medical research into diseases such as cancer and diabetes or for the growth of new replacement tissues. Bioreactor research at NASA's Marshall Space Flight Center is concentrating on how breast cancer cells grow and why breast cancer tumors grow and spread. Other bioreactor research has grown kidney cells that produce hormones needed by patients undergoing cancer chemotherapy. Also, researchers are using bioreactors to grow immune cells found in blood,

bone marrow and immune systems. Immune cells are responsible for fighting diseases and are often needed by patients undergoing chemotherapy, radiation therapy or diseases of the immune system.

NASA's bioreactor research program is providing new understanding of cancer of the skin, prostate, ovary, breast, bone and colon.

Better Drug Delivery For Fighting Tumors (STS-95 mission): Enclosing a drug in a tiny sphere for better delivery into the human body, a process called microencapsulation, has the potential to provide a number of new medical treatments for cancer by reducing the side effects of chemotherapy. During this Shuttle mission, researchers will work in the near-weightlessness of space to encapsulate two complementary drugs, an anti-tumor drug and an immune stimulant, to create a potent time-released drug for colon cancer.

Multi-layer Microcapsules Help Drug Delivery/Fight Tumors (STS-95 mission): In another microencapsulation experiment, researchers will form microcapsules, harvest them, and explore the use of electrostatic fields to add coatings to make the microcapsules more effective.

Using these "multi-layered" microcapsules, a chemotherapy treatment may be placed directly into cancerous tumors through one of the tumor's blood vessels. As the microcapsule swells, it may block the blood vessels in and around the tumor so that the chemotherapy treatment remains concentrated in the tumor. The swelling also reduces the blood supply to the tumor, strangling the unwanted tumor growth.

Researchers also want to develop a multi-layer capsule that can carry a dose of anti-tumor drug mixed with a radio-contrast oil. This oil will allow doctors to X-ray and monitor the accumulation of the capsules in the tumor to ensure that all regions of the tumor receive optimum treatment.

Anti-cancer Products From Plant Cells (STS-95 mission): Another area of exploration researchers will study is the production of anti-cancer drugs grown from plant cells.

Derived from soybean cells, these cell cultures have shown promise in commercial labs on Earth.

Key Enzymes/Proteins Offer Leads in Cancer Research (STS-95 mission): Urokinase is a protein identified as a key enzyme in the spread of brain, lung, colon, prostate and breast cancers. New information gathered from this research is helping scientists to better understand the structure of Urokinase and make more effective treatments for cancer by targeting Urokinase.

Human Proteins Lead to Clues About Bone Cancer (STS-95 mission): Aspartame is best known as an artificial sweetener, but researchers have discovered other uses for the substance, including use as a very

effective pain reliever for arthritis. On the next Shuttle mission, Aspartame will be used to help stabilize human antibody proteins important in bone cancer research. After it is grown in space as crystals, Aspartame will be analyzed to help researchers develop a treatment for multiple myeloma bone cancer.

Space Research Shines a Light On Tumors to Save Lives: Special lighting technology developed for NASA's commercial plant growth experiments in space may help treat cancer and save lives on Earth.

A treatment technique called Photodynamic Therapy is using tiny pinhead-size light emitting diodes -- developed for NASA Space Shuttle plant growth experiments -- to activate light-sensitive, tumor-treating drugs.

Experiments at the Medical College of Wisconsin in Milwaukee, Wis., indicate that when special tumor-fighting drugs are illuminated with light emitting diodes, tumors are more effectively destroyed than with conventional surgery. Approved by the Food and Drug Administration, light-emitting diodes and light-sensitive drugs are being tested today to treat and remove children's brain tumors.

Researchers Testing Treatment for Skin Cancer: A treatment for a deadly skin cancer is being tested through the joint research efforts of NASA's Marshall Space Flight Center, the Center for Macromolecular Crystallography of the University of Alabama at Birmingham, and BioCryst Pharmaceuticals, Inc, also in Birmingham.

In the past, patients suffering from the cancer known as cutaneous T-cell lymphoma have had no hope of recovery. Once the cancer moved through the skin to the lymph glands, there was no treatment available. Patients typically would live no longer than three years after diagnosis.

The new skin cancer treatment is currently in Food and Drug Administration human clinical trials.

Drugs Made Crystal Clear: The "frequent flyers" of the space program are protein crystal growth experiments. Aboard nearly every Space Shuttle mission, protein crystals are grown by scientists involved in biotechnology research. Pure, precisely ordered protein crystals of large size and uniformity are in high demand by drug developers. Through these large crystals, researchers may be able to unlock the secrets of how to stop a disease. Protein crystals grown on the ground often cannot be grown as large or as ordered as researchers desire, obscuring these vital pathways to cures.

Space research has provided important advances in the understanding of many diseases, including AIDS, heart disease, cancer, diabetes, respiratory syncytial virus, sickle cell anemia, hepatitis and rheumatoid arthritis.

Academy urges "Sign Your Site" to Eliminate Wrong-Site Surgery

The American Academy of Orthopedic Surgeons has launched "Sign Your Site," a national education program to encourage surgeons in all medical specialties, other health care providers and hospital officials to implement effective controls to eliminate wrong-site surgery.

The Academy's Advisory Statement on Wrong-Site Surgery recommends the operating surgeon discuss the surgery with the patient before anesthesia, place his/her initials on the operative site using a permanent marking pen and then operate through or adjacent to his/her initials. The Advisory Statement also includes recommendations for specific actions to be followed if the surgeon discovers that he or she is performing or has performed wrong-site surgery.

The Executive Summary of the Wrong-Site Surgery Task Force Report and the Advisory Statement on Wrong-Site Surgery follows.

Executive Summary of the Wrong-Site Surgery Task Force Report

In early 1997, the American Academy of Orthopedic Surgeons established a task force on wrong-site surgery in part as a result of the recent national publicity. The task force investigated:

- *the incidence of wrong-site surgery
- *data on adverse results and paid claims
- *possible methods of prevention of wrong-site surgery in orthopedics

Through the investigation and in consultation with the Physician Insurers Association of America (PIAA), the task force found that wrong-site surgery occurs not only in orthopedic surgery, but also in many other surgical procedures.

Based upon research and recommendations by the task force, the American Academy of Orthopedic Surgeons adopted an Advisory Statement (which follows this Executive Summary). While some of the information applies specifically to orthopedics, the establishment of a protocol where the operating surgeon has a cogent discussion with the patient before anesthesia and his/her initials are placed on the operative site is a proven, effective method of prevention that can be universally adopted as policy in all operating rooms.

Incidence - The PIAA documented the incidence of wrong-site surgery for the period 1985 through 1995 with data collected from 22 member medical malpractice carriers insuring 110,000 physicians. During this period, a total of 106 out of 331 closed claims submit-

ted to these companies were for wrong-site surgery incidences occurring in non-orthopedic procedures. The average payment for these 106 closed claims was \$76,167.

Interestingly, 84 percent of wrong-site orthopedic surgery closed claims resulted in payment, compared to payment in only 30 percent of all other orthopedic closed claims.

In a review of all the wrong-site surgery records of one carrier, the task force found that most case files detailed that the surgeon was in error or an incorrect site was prepared and draped by OR staff. In several cases the cause of the wrong-site surgery was traced to the patient's incorrect identification of the surgical site or a documentation error made on the operative permit or preoperative radiograph.

Other reports to the task force demonstrated that wrong-site surgery occurred when general anesthesia had been administered, the surgeon was not in the operating room for induction of anesthesia or preoperative preparation, or was in a hurry. Evidence indicated that mistakes also resulted from prone or lateral positioning of the patient (that proved disorienting for the surgeon), incorrect labeling of X-rays, "flipped" X-rays, and, in the case of wrong-site spine surgeries, over-reliance on unreliable techniques for identifying and marking the appropriate disk levels.

The task force report, titled "Report of the Task Force on Wrong-Site Surgery" (September 1997, revised February 1998) specifically details the orthopedic wrong-site surgery closed claims including information on the anatomical site, type of surgery performed, time of discovery of the wrong-site surgery and subsequent action after discovery. This report is available on the Academy's Internet web site at: <http://www.aaos.org/wordhtml/meded/tasksite.htm>.

Prevention - The literature concerning prevention of wrong-site surgery is virtually nonexistent, but the task force was able to identify some recommended and tested methods of prevention. A review of the recommendations of the Alamo Orthopedic Society (James Giles, NM), the Canadian Orthopedic Association (Paul Wright, MD), and the MAG Mutual Insurance Company of Georgia suggests a method of limb identification that is simple, reproducible, non-intimidating to the patient and easily recognized by hospital staff.

The recommended method of prevention mandates that, before surgery, the surgeon checks the patient's chart and any radiographs, has the patient identify the correct site and side to be operated on, and then the site is marked with the surgeon's initials using a permanent marking pen. The surgeon then operates through or adjacent to the initials. The initials should not be draped out of the operative field and the surgeon should not make an incision unless the initials

are visible. The initials made with the permanent marking pen fade within 5 to 7 days without leaving a permanent mark. Making such a mark has not proven to alter the infection rate.

Statistics from the Canadian Orthopedic Association indicate that over the period 1995-96, after the COA recommended this method to its members, the frequency of orthopedic wrong-site surgery in Canada decreased.

Two methods have not proven to be as successful at prevention. They include the use of an "x" as an alternative to marking the correct site with initials and marking the wrong limb. In the former, the "x" may

- *imply the incorrect site to the surgical team

- *be inadvertently transferred to the opposite limb through skin contact.

In the latter, the marking on the wrong limb may be draped out of view.

The task force also discussed and recommended a protocol for the surgeon who discovers that he/she has performed or is in the process of performing wrong-site surgery. This protocol follows.

This summary is dated May 1998

Wrong-Site Surgery Advisory Statement

Wrong-site surgery is a devastating problem that affects both the patient and surgeon and results from poor preoperative planning, lack of institutional controls, failure of the surgeon to exercise due care, or a simple mistake in communication between the patient and the surgeon.

Wrong-site surgery is not just an orthopedic surgery problem that occurs because the surgeon operates on the wrong limb. This is a system problem that affects other surgical specialties as well. While the number of reported orthopedic surgery cases is not high relative to the total number of orthopedic professional liability insurance claims, a retrospective study of a sample of insurers across the country provides evidence that 84% of the cases involving wrong-site orthopedic surgery claims resulted in indemnity payments over a ten year period, compared to all other types of orthopedic surgery claims where indemnity payments were made in 30% of orthopedic surgery claims during this same time period.

Recommendations For Eliminating Wrong-Site Surgery

Although the wrong-site surgery problem has been addressed on a local level in many areas of the country, there has been no organized national effort to eliminate wrong-site surgery. The Canadian Orthopedic Association mounted a significant educational program from 1994 - 1996 to eliminate this problem and has reported that the number of known wrong-site ortho-

pedic surgery claims in Canada has subsequently dropped dramatically.

The American Academy of Orthopedic Surgeons believes that a unified effort among surgeons, hospitals and other health care providers to initiate preoperative and other institutional regulations can effectively eliminate wrong-site surgery in the United States.

Consequently, the AAOS urges other surgical and health care provider groups to join the effort in implementing effective controls to eliminate this system problem.

Effective Methods of Eliminating Wrong-Site Surgery

Wrong-site surgery is preventable by having the surgeon's initials placed on the operative site using a permanent marking pen and then operating through or adjacent to his or her initials. Spinal surgery done at the wrong level can be prevented with an intraoperative x-ray that marks the exact vertebral level (site) of surgery. Similarly, institutional protocols should include these recommendations and involve operating room nurses and technicians, hospital room committees, anesthesiologists, residents, and other preoperative allied health personnel.

Consequently, eliminating wrong-site surgery means the surgeon's initials are placed on the operative site in a way that cannot be overlooked and in a manner that will be clearly incorrect if transferred onto another body area prior to surgery. The patient's records should also be available in the operating facility.

In keeping with its Code of Ethics, the Academy believes that in any communication with the patient or patient's family regarding care rendered, particularly in relation to an untoward event such as wrong site surgery, orthopedic surgeons must be truthful in all circumstances.

As indicated in the following recommendations, particular circumstances of individual cases require specific and different actions on the part of the surgeon in the event that wrong site surgery is discovered, but in all cases the patient's choice and the best interest of the patient should be the determining factors in decision making.

This Advisory Statement is dated September 1997.

Recommendations for Management Following the Discovery of Wrong Site Surgery

A. General

If, during the course of a surgical procedure, or after surgery has been completed, it is determined that the surgery is being or has been performed at the wrong site, the surgeon should always:

- (1) act in accord with the patient's best interests

and to promote the patient's well-being;

(2) record the events in appropriate medical records;

B. General Anesthesia

If the procedure is being performed under general anesthesia, when it is determined that the surgery is being performed at the wrong site, the surgeon should:

(1) take appropriate steps to return the patient, as nearly as possible, to the patient's pre-operative condition;

(2) perform the desired procedure at the correct site, unless there are medical reasons not to proceed. For example, if proceeding with the surgery at the correct site would materially increase the risk associated with extended length of the surgical procedure or if correct site surgery would likely result in an additional and unacceptable disability;

(3) advise the patient, and the patient's family, if appropriate, as soon as reasonably possible, of what occurred and the likely consequences, if any of the wrong site surgery.

C. Local Anesthesia

If the procedure is being performed under a local

anesthesia and the patient is clearly able to comprehend what has occurred and competent to exercise judgment, the surgeon should:

(1) take appropriate steps to return the patient, as nearly as possible, to the patient's pre-operative condition;

(2) advise the patient of what has occurred, recommend to the patient what, in the surgeon's best judgment, is the appropriate course for the patient to follow under the circumstances; and

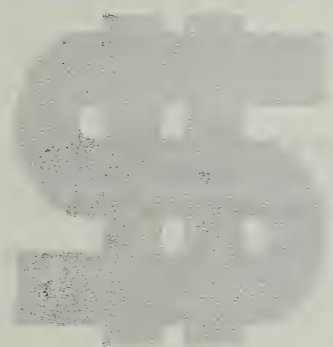
(3) truthfully answer any relevant question posed by the patient and then proceed as directed by the patient.

D. Discovery After Surgery

If, after the surgical procedure has been completed, it is determined that the surgery was performed at the wrong site, the surgeon should: as soon as reasonably possible, discuss the mistake with the patient and, if appropriate, with the patient's family and recommend an immediate plan to rectify the mistake unless there is a medical reason not to proceed.

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CORRECTION NOTICE

In the October 1998 issue, in the article "*The Widening Spectrum of Lymphocytic Hypophysitis*," the top left photo (Figure 1A) on page 198 is upside down. This error occurred at the printer after all proofing and corrections were completed at the AMS office. We apologize for any inconvenience this may have caused the authors of the article and journal readers.

AMS Newsmakers

Dr. Nicholas P. Lang, a general surgeon in Little Rock, was recently selected to serve as first vice president of the Southwestern Surgical Congress for 1998-99.

Dr. Michael Moody, AMS president; Dr. Steven Strode, a Little Rock family practitioner; and Dr. Harry P. Ward, UAMS Chancellor, visited with AMA President Nancy Dickey, M.D., while she was in Little Rock recently.



Left to right: Drs. Moody, Dickey and Strode



Left to right: Drs. Ward, Dickey and Moody

The AMA Physician's Recognition Award is Awarded each month to physicians who have completed acceptable programs of continuing education. The AMS recipients for the month of September are: Walter Max Adam, Pine Bluff; Ricky Wayne Harrison, Russellville; Demetrio M. Hechanova, Hot Springs National Park; William Taylor Henry, Little Rock; Robert

Leigh Kale, Fort Smith; Jerome Haywood Luker, Russellville; Stephen Chas Manus, Fort Smith; Robert Carlton Power, Little Rock; Douglas F. Smart, Little Rock; and Wendell W. Weed, Fayetteville.

The home of Dr. Ronald Reese, a Harrison family practitioner, was the site of the Boone County Medical Society's 12th Annual Legislative Appreciation Fish Fry on August 20. With more than 200 attendees, the event recognized area legislators and community leaders.



Among the dignitaries attending the Boone County Fish Fry were (pictured left to right): U.S. Congressman Asa Hutchinson; Secretary of State Sharon Priest; Rep. Jim Milum; Sen. Jon Fitch; Rep. Randy Laverty; Rep. Billy Joe Purdom; and Sen. Gary Hunter. Master of Ceremonies Bob Langston, M.D., is pictured in the background.

Send your accomplishments and photo for consideration in *AMS Newsmakers* to:

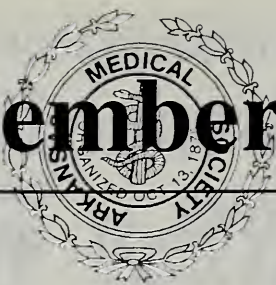
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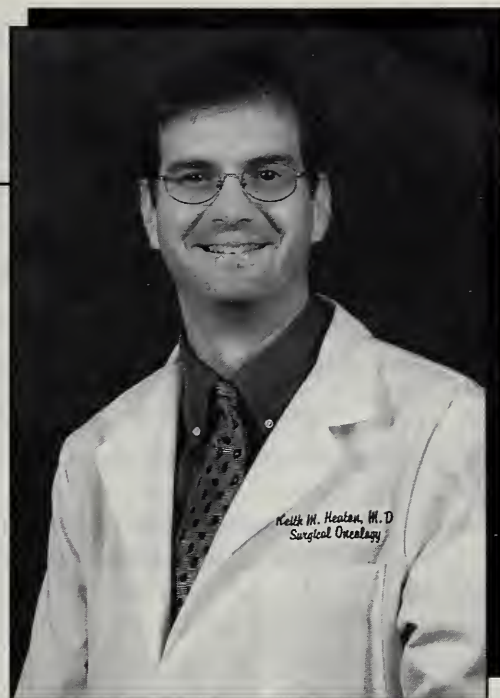
Little Rock, AR 72215-5088



New Member Profile



Keith M. Heaton, M.D.



PROFESSIONAL INFORMATION

Specialty: Surgical Oncology

Years in Practice: One

Office: Little Rock

Medical School: University of Kansas School of Medicine, Kansas City, Kansas, 1989

Internship/Residency: University of Cincinnati, 1990/1996

Fellowship: University of Texas M.D. Anderson Cancer Center, Houston, Texas, 1998

Other Business Affiliates/Organizations: American Medical Association, Candidate Member of the Society of Surgical Oncology and Associate Member of the American College of Surgeons

Honors/Awards: Alpha Omega Alpha Medical Honor Society

PERSONAL INFORMATION

Family: Wife, Beth

Date/Place of Birth: September 16, 1963, in Houston, Texas

Hobbies: Snow skiing, scuba diving and biking

THOUGHTS & OTHER INFORMATION

If I had a different job, I'd be: An adventure travel consultant

Favorite vacation spot: Canada, Montana or anywhere else I can snow ski

When I was a child, I wanted to be: An astronaut

First Job: Mowing lawns

Worst Job: Working at movie theater snack bar

The last book I read: "Into Thin Air" by John Krakauer

One word to sum me up: Hard-working

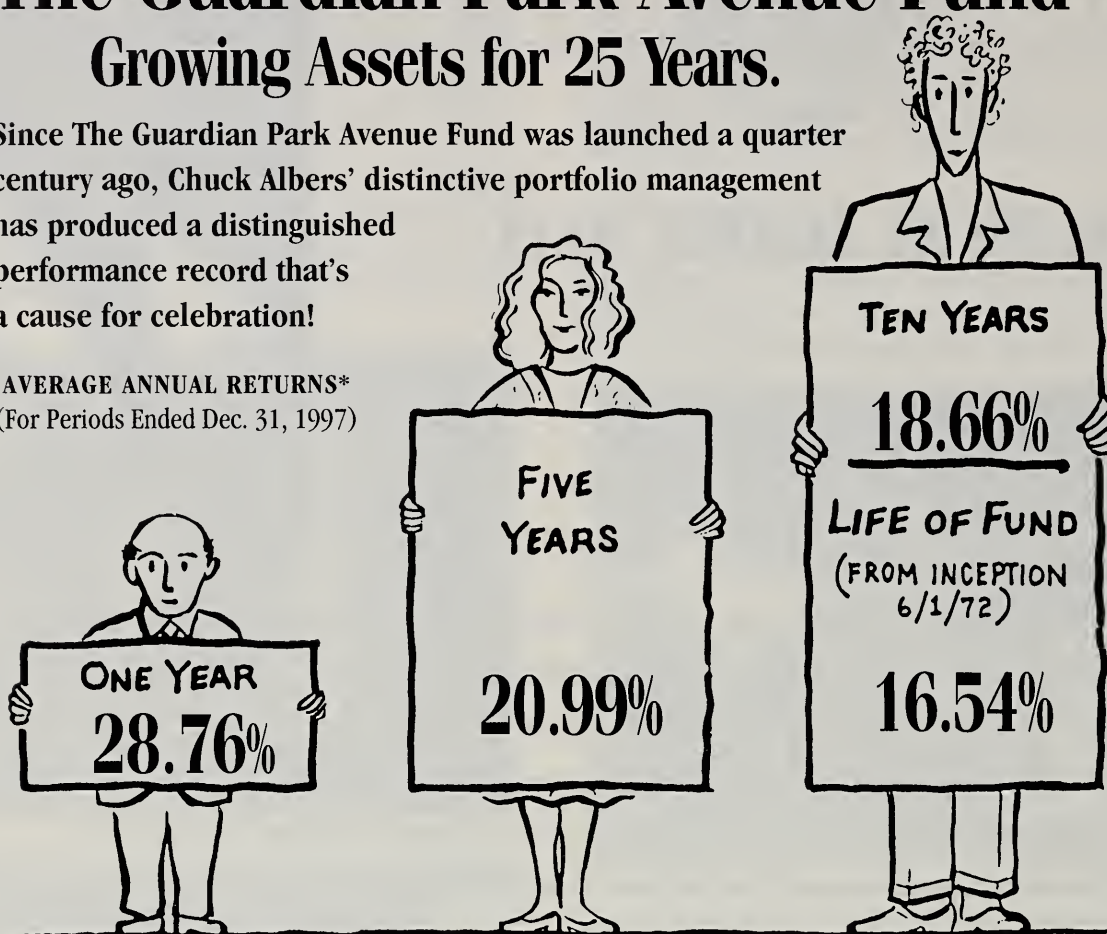
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Baby Doe Revisited

James A. Tanner, M.D.*

Ethics, Law and the Care of Critically Ill Infants

Some decisions are just too painful to face. A newborn child, born prematurely with severe physical and mental abnormalities, will require months of intensive care and multiple operations in order to survive. Even with the most aggressive treatments, the child will be permanently and severely disabled. Without intensive treatments and surgery, the child will not survive. As a parent, do you consent to the surgery? As a doctor, what do you recommend? How do we judge the "quality of life"? Should the government have a role in the decision process? Who is protecting the best interests of the child? Is this the best utilization of scarce resources, and who will pay for the long-term care?

Ethical dilemmas regarding resuscitation and life prolonging treatment of severely compromised infants are daily faced by physicians working in neonatal intensive care units and by the families of these infants. Initial attention was focused on infants born with major congenital abnormalities. With advances in neonatal care, many infants with severe physical and mental damage are now able to survive only to face long-term institutionalized care. How these ethical dilemmas are addressed has been the subject of professional and public debate for the past 25 years.

Legal Background and Historical Perspective

On April 9, 1982, an infant known as Baby Doe was born in Bloomington, Indiana. The baby had Down's syndrome, a genetic defect, and esophageal atresia, an anatomical defect where the esophagus is not connected to the stomach. Multiple surgical procedures would be required to correct the anatomical defect. The parents refused to give consent for the surgery to correct the anatomical defect based on the perception of the future quality of life due to Down's syndrome. The hospital initiated proceedings to override the parents' decision. An Indiana trial court denied requested relief. The court asked the local Child Protection Committee to review the decision. The Com-

mittee found no reason to disagree with the court. Appeals to the Indiana Court of Appeals and to the Indiana Supreme Court were rejected. The infant died after 6 days of life, unable to eat or take fluids.

Federal response was swift and direct. On May 18, 1982, the Department of Health and Human Services (HHS) Office of Civil Rights notified health care providers receiving federal financial assistance that newborn infants with handicaps such as Down's syndrome were protected by § 504 of the Rehabilitation Act of 1973. On March 7, 1983, an "Interim Final Rule" was issued establishing "procedures relating to the health care for handicapped infants."¹ The regulations required the following:

(1) Hospitals must post the following informational notice containing the telephone number of the appropriate state child protective agency and a toll-free "hotline" number to Department of Health and Human Services.

Federal law prohibits discrimination on the basis of handicaps. Under this law, nourishment and medically beneficial treatment (as determined with respect for reasonable medical judgments) should not be withheld from handicapped infants solely on the basis of their present or anticipated mental or physical impairments. This Federal law, section 504 of the Rehabilitation Act of 1973, applies to programs or activities receiving Federal financial assistance.

(2) Immediate access to medical records, with or without the consent of the parents, "when, in the judgment of the responsible Department official, immediate access is necessary to protect the life or health of a handicapped individual."

(3) Expedited compliance to allow "the government a temporary restraining order to sustain the life of a handicapped infant in imminent danger of death."

The American Hospital Association and the American Academy of Pediatrics immediately challenged the rule. On April 14, 1983, the Federal District Court of the District of Columbia declared the Interim Final Rule "arbitrary and capricious and promulgated in violation of the Administrative Protective Act" for failing to solicit public comment before issuing the rule.²

On July 5, 1983, HHS issued new "Proposed Rules" and invited public comment. The Proposed Rules were similar to the Interim Final Rule, but also required fed-

* Dr. Tanner is a gynecologist with the Arkansas Women's Center, P.A., in Little Rock.

erally assisted state child protective services to use their "full authority pursuant to State law to prevent instances of medical neglect of handicapped infants."³ The new rules would take effect February 13, 1984.

On October 11, 1983, a child known as "Baby Jane Doe" was born in Long Island, New York. The child had multiple congenital abnormalities. The child was transferred to University Hospital at Stony Brook for further treatment. After consultation with medical specialists and other advisors, the parents decided not to consent to corrective surgery that was likely to prolong the child's life, but would not improve many of the handicapping conditions. On October 19, 1983, HHS received a complaint from a "private citizen" that Baby Jane Doe was being denied medically indicated treatment. On October 22, 1983, HHS requested the medical records for review, but the request was refused because the parents had not consented to the record release. On November 2, 1983, the Government sued the University Hospital to obtain the information necessary to ascertain compliance with § 504 of the Rehabilitation Act of 1973.⁴ The District Court ruled against the Government because the hospital "failed to perform the surgical procedures in question, not because Baby Jane Doe was handicapped, but because her parents refused to consent."⁵ The Court of Appeals affirmed the decision on February 23, 1984. Furthermore, the Court of Appeals stated that it "never contemplated that § 504 of the Rehabilitation Act would apply to treatment decisions involving defective newborn infants when the statute was enacted in 1973, when it was amended in 1974, or at any subsequent time."⁶

Despite the decision in *United States v. University Hospital*, the Proposed Rules took effect February 13, 1984. The American Hospital Association and others challenged the validity of the rules on March 12, 1984.⁷ The Federal District Court for the Southern District of New York awarded the requested relief based on the decision of the University Hospital case. The U.S. Court of Appeals for the Second Circuit affirmed the decision. On June 9, 1986, the U.S. Supreme Court upheld the lower courts and rejected the view that it is prejudicial or unjust to evaluate an infant's handicap in selecting a treatment plan. The Supreme Court argued that "where medical treatment is at issue, it is typically the handicap itself that gives rise to, or at least contributes to the need for services."⁸ If children who were "otherwise qualified" were not treated because of their race, this would violate Section 504 of the U.S. Rehabilitation Act. But infants who have multiple handicaps or who are extremely premature may not, precisely because of these conditions, be otherwise qualified for treatment.

As the original regulations based on section 504 of the Rehabilitation Act of 1973 were invalidated in 1984, Congress was quick to notice and react. The Child Abuse Prevention and Treatment Act was amended in 1984 to address the issues of mandatory life-sustaining

treatment for critically ill children. The Amendments require States wishing to receive federal funds for child protection services to *establish a mechanism to report and respond to suspected cases of "medical neglect," including authority under State law to initiate legal proceedings to prevent the withholding of medically indicated treatment from disabled infants with life-threatening conditions.*⁹ The Amendments mandate maximum life-sustaining treatment for all disabled infants with life-threatening conditions except for three exceptions:

(1) The case of an infant who "is chronically and irreversibly comatose."

(2) The case in which treatment would "merely prolong dying, not be effective in ameliorating or correcting all of the infant's conditions, or be otherwise futile in terms of the survival of the infant."

(3) The case in which "the provision of such treatment would be virtually futile in terms of the survival of the infant and the treatment itself under such circumstances would be inhumane."¹⁰

At least two states, Pennsylvania and Indiana have elected to refuse federal funds for child protection services. Thus, they are under no obligation to comply with the provisions of the Child Abuse Prevention and Treatment Act.

Implementation of the Child Abuse Prevention and Treatment Act

The Amendments to the Child Abuse Prevention and Treatment Act have delegated the legal interpretation and enforcement to the state Child Protective Services Agencies, but have done very little to address the moral and ethical issues of quality of life, allocation of scarce resources, and decision authority. Each state must now individually decide how to respond to cases of suspected "medical neglect."

Such was the case of *Guardianship of Barry vs. Florida*. This case involved the decision by the parents, after consultation with attending physicians and family members, to remove life support from their 10-month-old child, Andrew James Barry. The child was in a chronic vegetative coma, absent cognitive brain function, and terminally ill. The child had been on life support since 36 hours following birth. The parents' decision was accompanied by affidavits from three concurring physicians who had examined the child. And finally, the *guardian ad litem*, appointed by the court, filed a petition concurring in the conclusion of the three physicians. He recommended that the petition be granted on the assumption that the infant, if competent to make the decision on his own, would conclude the same course of action to remove the life support system. However, the state attorney denied the findings and asked that the petition be dismissed. His request was based on the state's right to preserve life. The 2nd District Court of Appeal of Florida upheld the decision of the parents.¹¹

Like most states, Arkansas law establishes the roles

and responsibilities of the patient, parent, and physician in cases of medical decisions.¹²

"If any person is a minor and in the opinion of the attending physician, is not able to make health care decisions, then such decisions may be executed by the first of the following individuals who exist and are reasonably available for consultation;

(1) A legal guardian of the patient, if one has been appointed

(2) In the case of an unmarried patient under the age of eighteen (18), the parents of the patient."¹³

The Arkansas state statute allows discontinuation of life-saving medical technology of a "qualified patient" ...who has been determined by the attending physician to be in a terminal condition or in a permanently unconscious state by the attending physician and another qualified physician who has examined the patient."¹⁴

While these cases involve many philosophical issues, in practicality very few are heard before the courts. Of the cases brought before the court, deep moral and ethical feelings are invoked by all parties involved. The law provides an objective view to a somewhat subjective matter.

Billye Burke, Arkansas Department of Human Services

The *Guardianship of Barry vs. Florida* case, while certainly a tragedy, was relatively straightforward. However, situations where there are disagreements between parents and physicians create a necessity for the court system to intervene. Many questions are raised when parents want to terminate life support, but attending physicians do not concur due to medical uncertainty, ethical standards, or criminal liability issues.

Laws, regulations, and state statutes suffer from the inability to evaluate the circumstances of individual patients. There is a long tradition of basing medical care for children on a determination of their best interests (known as the "best-interest standard").¹⁵ In many cases, conflicts may arise between what is perceived to be the infant's "best interest" and the legal requirements imposed by federal and state regulations. An alternative resolution mechanism has been suggested in the form of bioethical review committees.

Bioethical Review Committees

The American Academy of Pediatrics addressed the issue with a Task Force Report in 1983.¹⁶ The report recommended the establishment of ethics committees to assist in decision making for "...Those patients who were so impaired that there is no likelihood of their benefiting from treatment and for those whom treatment will bring more pain and suffering without compensating benefits as well as those ...awaiting an imminent and unavoidable death."

In a widely publicized decision by the New Jersey Supreme Court in 1976, the Court permitted the re-

moval of a respirator from Karen Ann Quinlan, a patient in an irreversible coma. Additionally, they encouraged committees to be established for the purpose of decisional review in similar cases.¹⁷

President Reagan's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research published a multi-volume report in 1983. In the volume entitled *Deciding to Forgo Life Sustaining Treatment* the Commission states, "when the benefits of therapy are unclear, an ethics committee or similar body might be designated to review the decision making process ...cases included in this category should certainly encompass those in which a decision to forgo life sustaining therapy has been proposed because of a physical or mental handicap."¹⁸ Additionally, the Commission stated that "public policy should resist state intrusion in family decision making unless serious issues are at stake and the intrusion is likely to achieve better outcomes without undue liabilities."¹⁹

The legal status of hospital bioethics committees remains in question. In Arkansas, if the committee is structured as a medical staff review committee, the deliberations are protected in terms of confidentiality and immunity. Others argue that better recommendations from ethics committees result from deliberations that are open to outside scrutiny.²⁰ Committee recommendations can provide ethical comfort to parents and staff that must carry out these difficult decisions. In cases of disagreement of the interested parties, the ethics committee may serve as the referral source to Child Protective Agencies for legal intervention.

Allocation of Scarce Resources

Employers, government, and private health care plans increasingly scrutinize health care expenditures. Expensive medical technologies, expectations of the public, and social responsibilities to the severely disabled must be balanced against health care budgets and competing social priorities. Physicians are increasingly faced with practical, ethical, and legal questions regarding the allocation of scarce medical resources.

The ethics of resource allocation may be considered in relation to the concept of justice and the fiduciary duty of a physician toward the patient.²¹ According to Aristotle's principle of distributive justice, equals should be treated equally and those who are unequal should be treated unequally. Unequal treatment is justified when resources are allocated in light of morally relevant differences, such as those pertaining to need or likely benefit.²² Characteristics such as race, sex, religion, social status or age alone are morally irrelevant criteria for resource allocation. Unfortunately, no standard theory of justice exists today to balance the competing claims of need and benefit.

The lack of a comprehensive theory of justice gives rise to unresolved issues in rationing. These have been categorized by Daniels as follows:²³

- The fair chances versus best outcomes problem.

To what degree should producing the best outcome be favored over giving every patient an opportunity to compete for limited resources?

- **The priorities problem.**

How much priority should we give to treating the sickest or most disabled patients?

- **The aggregation problem.**

When should we allow an aggregation of modest benefits to larger numbers of people to outweigh more significant benefits to fewer people?

- **The democracy problem.**

When must we rely on a fair democratic process as the only way to determine what constitutes a fair rationing outcome?

These questions help us to understand the complexity of the resource allocation problem and the dilemma physicians face as they balance their obligation to individual patients as opposed to a patient population. A variety of solutions have been proposed. They include formation of ethics committees, governmental regulation, and statistical methods that use quantitative indicators for prognosis. The problem with these proposals is that general guidelines for patient populations cannot be applied to complex individual cases.

Physicians are asked to function as patient advocates yet are expected to resolve conflicting claims for scarce resources using fair and publicly defensible procedures. "The American Academy of Pediatrics thinks that judgements about which diagnostic categories of patients should receive or be denied intensive care based on considerations of resource use are social policy deliberations and should be made after considerable public discussion, not ad hoc at the bedside."²⁴

Baby Doe Revisited

Baby Doe was born April 9, 1982. The legal and ethical questions of parental authority and "medical neglect" continue to be debated and are far from resolved. Judicial and legislative consensus has developed that the values of patients, rather than values of physicians or policy makers, should determine the extent of life-sustaining medical technology.²⁵ Which values and whose authority should govern treatment decisions of critically ill newborns? What is the role of the government? Should the management of Baby Doe be different in Indiana, Florida, Arkansas, or New York? Is our society ready to make decisions regarding the high cost of care and appropriate "resource allocation"?

Before Baby Doe, state law vested the responsibility for medical decisions with the parents, subject to review in exceptional cases by the state acting as *parens patriae*. Despite a decade of litigation, legislation, and regulation, very little has changed. Parents have a vital role in decision making under the presumption that they accept responsibility for nurturing the infant and providing reasonable care.²⁶ Physicians should recommend the provision or forgoing of care based on the projected benefits and burdens of treatment, rec-

ognizing that parents may perceive and value these benefits differently from medical professionals.²⁷ Properly formed ethics committees may assist in the decision process and assist in emotional healing for families and medical staff. However, these committees have no legal authority. In rare instances when parents and physicians disagree regarding life sustaining medical technology, state child protective agencies will be asked to intervene and state courts will be asked to rule on the most basic of ethical questions - determining the quality of life.

Editor's Note: This article was originally presented as a research project for the Executive Master of Business Administration Program at the University of Arkansas at Little Rock.

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Prevention of Perinatal Transmission of HIV in Arkansas

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Abstract

In 1994, the Centers for Disease Control and Prevention (CDC) recommended zidovudine (ZDV) prophylaxis to reduce perinatal transmission of HIV. Caregivers at the University of Arkansas for Medical Sciences (UAMS) instituted a program of universal voluntary HIV testing of pregnant females combined with maternal education regarding ZDV prophylaxis in October 1994. Since that time, 7 of 39 (18%) infants referred to Arkansas Children's Hospital (ACH) for evaluation of perinatal HIV exposure have been infected compared to 21 of 53 (40%) referred prior to October 1994, ($p = 0.042$). Unfortunately, of the 39 infants referred to ACH after October 1994, 21 were born to HIV-infected mothers who did not comply with prophylaxis. Fifteen of these mothers were not offered intravenous ZDV during delivery; five have children infected with HIV. These data indicate the need for increased efforts by health officials in Arkansas to institute nationally recommended methods of prevention of perinatal HIV.

Pediatric HIV is a Major Problem

On a global scale, 10% of all AIDS cases are children; 1.3 million children have recognized HIV infection. In 1996, it is estimated that over 1,000 infections occurred per day in children. Every day, 17,000 people become infected, and because 50% of new infections occur in women, the numbers of infected children worldwide will continue to rise.

In the United States, despite the availability of ZDV prophylaxis to decrease the risk of HIV transmission from mother to infant, pediatric HIV is still a problem. In 1996, there were about 7,500 United States children younger than 13 with AIDS. More than 80% of these are younger than 5 years old. About 95% have vertically acquired disease. Also, 2,354 adolescents between 13 and 19 years of age, and 18,955 young men and

women between the age of 20 and 24 were diagnosed with AIDS. These people were almost certainly infected as young people and adolescents. The greatest proportion of increases in cases has occurred in women, adolescents and young adults, and minorities. Only 2% of recent adolescent male HIV cases were from heterosexual contact, but more than 50% of female adolescents were infected through heterosexual contact. This increase in infected females of childbearing age has obvious repercussions on the incidence of perinatal HIV.

In the state of Arkansas, from 1983 through 1997, the cumulative number of HIV positive persons reported was 3,893. For the year of 1997, 364 adult cases of HIV infection were reported with 95 being women of childbearing age. Currently at ACH we follow fourteen children and three adolescents infected with HIV. All of the children acquired their disease perinatally. We have seen an average of 16 new HIV-exposed children each year at our hospital for the past three years.

Impact of ACTG 076 in Arkansas

Results of the National Institutes of Health sponsored ACTG 076 Protocol were published in 1994. This study randomized HIV-infected pregnant mothers to receive ZDV or placebo. The patients who received ZDV were given 100 mg by mouth five times per day. This was started at 14-34 weeks of gestation and continued throughout the pregnancy. When labor began, ZDV was changed to an intravenous infusion form with a loading dose of 2 mg/kg over one hour, followed by a 1 mg/kg/hour continuous infusion until delivery. The newborns received oral ZDV within eight to twelve hours of birth at 2 mg/kg/dose four times per day for six weeks (see Table 1). The treatment protocol reduced the risk of maternal-infant transmission by 67.5% (from 25.5% in the placebo group to 8.3% in the treated group). Based on these data, the United States Public Health Service made recommendations in June of 1994 for universal voluntary testing of pregnant women for HIV, and for ZDV prophylaxis of infected mothers and their newborns. These recommendations were formally instituted by the Obstetrics and Gynecology Department at UAMS in cooperation with the Pediatric Infectious Diseases Department at ACH in October of 1994.

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**Table 1*: Zidovudine regimen for prophylaxis
of perinatal transmission of HIV from ACTG-076:**

- Oral administration of 100 mg of ZDV five times daily, initiated at 14-34 weeks of gestation and continued throughout the pregnancy.
- During labor, intravenous administration of ZDV in a 1-hour loading dose of 2 mg/kg of body weight, followed by a continuous infusion of 1 mg per kg of body weight per hour until delivery.
- Oral administration of ZDV to the newborn. ZDV syrup at 2 mg/kg of body weight per dose every 6 hours for the first 6 weeks of life, beginning 8-12 hours after birth

**Centers for Disease Control and Prevention: Recommendation of the U.S. Public Health Service Task Force on the use of zidovudine to reduce perinatal transmission of human immunodeficiency virus. MMWR 1994(RR-11): 1-21.*

University of Arkansas Medical Science Area Health Education Centers around the state were also informed of and encouraged to follow the ACTG 076 protocol.

In order to determine the impact of the ACTG 076 protocol on perinatal HIV in Arkansas, we conducted a retrospective chart review of all infants referred to the ACH Pediatric Infectious Diseases Clinic due to perinatal HIV exposure through December 1997. Patient charts were reviewed for place of birth, and for evidence of adherence to the three phases of the protocol: 1) prenatal oral ZDV for the mother, 2) intravenous ZDV during delivery to the mother, and 3) postnatal oral ZDV for the baby. A mother and infant who did not receive all three phases of treatment were defined as "non-adherent." The rate of infection in children born prior to and post-institution of the ACTG 076 protocol at UAMS were compared. In addition, the rate of infection in children born to mothers who had completed the protocol was compared to the rate in those who were non-adherent.

We were pleased to find that the rate of perinatal infection decreased by 55% after the ACTG 076 protocol was instituted at UAMS and ACH. Twenty-one of 53 (40%) infants referred prior to institution of the protocol were determined to be infected with HIV compared to 7 of 39 (18%) infants referred after its institution in October 1994 ($p = 0.042$). Unfortunately, 21 of the 39 (54%) mother-infant pairs referred to ACH between October 1994 and December 1997 were determined to be non-adherent as regards the ACTG 076 protocol. Fifteen of these 21 mothers (71%) were not offered intravenous ZDV during delivery of their baby. Fourteen of these 15 delivered at Arkansas hospitals outside Pulaski county. Telephone contact with pharmacists of the respective hospitals revealed that the intravenous formulation of ZDV was not available at the time of the infant's birth. One mother delivered at UAMS in late October 1994, four days after the 076 protocol was formally recommended at our institution. Six of the women in the non-adherent group received intravenous ZDV during delivery, but were

non-compliant with prenatal oral ZDV in themselves and/or postnatally in their infants. Among those babies referred to ACH after October 1994, we have determined 2 of 18 (11%) in whom prophylaxis recommendations were followed to be infected with HIV, compared to 5 of 21 (24%) in the non-adherent group ($p = 0.54$).

It is likely that all infants born in Arkansas to HIV-infected mothers are referred to the ACH Pediatric Infectious Diseases Clinic. Thus, our data suggest a positive impact of ACTG 076 on pediatric HIV transmission in Arkansas. Tragically, 38%

of the infants referred to our clinic for HIV exposure after the 076 protocol was recommended were born to mothers who were not offered intravenous ZDV during delivery despite determination of a positive HIV status. Twenty-eight percent were not offered oral ZDV during pregnancy or intravenous ZDV during delivery. The majority of non-adherence was due to departure from the 076 Protocol by healthcare professionals caring for the mothers rather than to non-compliance with medication by the mother. These data stress the need for increased efforts by health officials in Arkansas to institute nationally recommended methods of prevention of perinatal HIV. Arkansas healthcare professionals caring for women must be aware of the implications of a positive HIV test in an expectant mother and have knowledge of avenues for effective maternal HIV counseling and treatment and for prevention of HIV transmission from mother to infant.

It should be emphasized that along with information regarding the potential for reduction of HIV transmission to their infants, mothers should be told of the lack of data on long-term risks to themselves and their infants. Recent studies have revealed that ZDV is effective in reducing transmission regardless of maternal viral load. In treatment-naïve women, higher HIV RNA levels correlate with increased transmission risk. However, in ZDV-treated women this relationship is markedly attenuated. Therefore, the use of the full ZDV regimen should be discussed with and offered to all infected pregnant women regardless of the level of disease. Close follow-up of the mother and repeated education may encourage compliance and is recommended.

New knowledge regarding the pathogenesis of HIV infection has prompted additional therapy recommendations from the Department of Health and Human Services (DHHS) and the Henry J. Kaiser Family Foundation together with the National Institutes of Health (NIH). These new recommendations include a consideration and discussion of other options for antiretroviral therapy with the mother as regards indi-

cations specific to her health, and separate from reducing the risk of perinatal transmission.

Antiretroviral Therapy in the HIV-Infected Pregnant Woman

In the past two years there have been major advances in both basic science and clinical research on AIDS. In the past, the only marker of disease that was available was the T helper count, which indicates the extent of HIV-induced immune damage already suffered. The new availability of reliable tests to measure a patient's viral load gives the physician and patient information regarding the magnitude of HIV replication and its associated rate of T helper cell destruction. An asymptomatic patient with a normal T helper count, but a high viral load can be predicted to have a more rapid rate of disease progression than an asymptomatic patient with a normal T helper count and a low viral load. Therefore, treatment decisions should be based on level of risk indicated not only by T helper counts, but also by plasma HIV RNA levels.

The NIH has issued a report on principles of therapy of HIV infection based on such new information. One of these principles is that women should receive optimal antiretroviral therapy regardless of pregnancy status. The use of potent combination antiretroviral therapy to suppress HIV replication to below the levels of detection of sensitive plasma HIV RNA assays limits the potential for selection of antiretroviral-resistant HIV variants, the major factor limiting the ability of antiretroviral drugs to inhibit virus replication and delay disease progression. Thus, another principle is that maximum achievable suppression of HIV replication should be the goal of therapy. The most effective means to accomplish durable suppression of HIV replication is the simultaneous initiation of combinations (2 nucleoside reverse transcriptase inhibitors, ZDV and 3TC for example and 1 protease inhibitor, indinavir) of effective anti-HIV drugs with which the patient has not been previously treated and that are not cross-resistant with antiretroviral agents with which the patient has been treated previously. No long-term safety studies are available regarding the use of any antiretroviral agent during pregnancy. Thus, antiretroviral therapy in any pregnant woman with HIV is a risks versus benefits situation.

Treatment decisions should take into account the current and future health of the mother, as well as prevention of perinatal transmission and ensuring the health of the fetus and neonate. Care of the HIV-infected pregnant woman should involve collaboration between a HIV specialist, her obstetrician, and the woman herself. Because the first trimester of pregnancy is the most vulnerable time with respect to teratogenicity (particularly the first 8 weeks), it may be advisable to delay the initiation of antiretroviral therapy until 14 weeks gestational age when feasible. However, treatment of a pregnant woman with an

antiretroviral regimen that does not suppress HIV replication to below detectable levels may select for the development of antiretroviral drug-resistant HIV variants and limit her ability to respond favorably to effective combination therapy regimens in the future. Thus, many experts recommend continuation of a maximally suppressive regimen even during the first trimester. There are currently insufficient data to support or refute concerns about potential teratogenicity.

In summary, transmission of HIV from mother to infant can take place at all levels of maternal viral loads, although higher viral loads tend to be associated with an increased risk of transmission. Zidovudine therapy has been shown to be effective at reducing perinatal HIV transmission regardless of maternal viral load. Therefore, use of the recommended regimen of ZDV alone or in combination with other antiretroviral drugs should be discussed with and offered to all HIV-infected pregnant women, regardless of their plasma HIV RNA level. Although studies of combination therapy with protease inhibitors in pregnant infected women are in progress, there are currently no data available regarding drug dosage, safety and tolerance in pregnancy. Healthcare providers who are treating HIV-infected pregnant women are strongly encouraged to report cases of prenatal exposure to antiretroviral drugs alone or in combination to the Antiretroviral Pregnancy Registry, (919)-483-9437 or (800)-722-9232, ext. 39437. The registry is a collaborative project jointly managed by several pharmaceutical companies, with an advisory committee of practitioners and CDC and NIH staff. For further information concerning the use of ZDV prophylaxis or other antiretrovirals in pregnant women with HIV, or updates and new information, please call either the Obstetrics and Gynecology Office at UAMS at (501)-686-7164, the Infectious Diseases Division at UAMS at (501)-686-5585 or the Pediatric Infectious Diseases Division at ACH at (501)-320-1416.

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Cooking Venison

Keith Sutton

Arkansas Game & Fish Commission

If you've given your deer proper care, the meat will have a delicious flavor you'll be proud to share with family and friends. Most of the strong, disagreeable flavor of venison is caused by failure to make a quick kill; delay or carelessness in dressing; failure to cool promptly and thoroughly; or blood and viscera from a shot or wound tainting the meat.

Venison is high in food value. A 3-1/2 ounce serving has 0.74 ounces of protein, but only 126 calories and 0.14 ounces of fat. A serving of beef sirloin the same size has only 0.55 ounces of protein but contains 288 calories and 0.86 ounces of fat.

If you want to overcome venison's wild flavor, cook it in a highly seasoned sauce using ingredients such as garlic, onion, tomatoes or herbs and spices like bay leaves, thyme and savory. Always trim away all fat as it has a very strong, unpleasant taste and turns rancid quickly.

The cooking method to use differs with the cut. Tender cuts like the loin and rib, and steaks and roasts from young animals, can be broiled or roasted. Venison is dry, lean meat, however, so add suet, butter or other fat when you roast or broil it. Less tender cuts, like the neck, shanks, flank and brisket, are best cooked by moist heat - braising, stewing or pot roasting; or they can be ground for deerburger, sausage or mince-meat or made into jerky.

Don't overcook. Venison toughens quickly if overcooked or cooked at too high a temperature. Plan to serve deer meat medium rare to well done, never overdone.

Marinades help tenderize and flavor venison. Place the meat in a non-metallic bowl, then cover with your favorite marinade and allow to stand for 12 to 24 hours before cooking.

The flavor and texture of ground venison is enhanced by adding fat. About one half pound of beef suet ground with five pounds of venison adds juiciness.

Venison can be prepared by any method you use

for beef, including in the microwave and crockpot and on the smoker. Just remember not to overcook. Following are a few recipes to try.

Barbecued Ribs

Ribs

Barbecue sauce

Place the ribs in a large roasting pan, and cover with your favorite barbecue sauce. Cover the roaster, and bake at 350 degrees for 1-1/2 hours, turning and basting several times.

Venison Marinade

2 cups vinegar

2 tablespoons sugar

2 cups water

1/2 teaspoon peppercorns

4 bay leaves

1 sliced onion

2 teaspoons salt

Mix all the ingredients together in a non-metallic bowl. Add the meat, and soak 12-24 hours in the refrigerator before cooking.

Venison Rump Roast

6-7 pound rump roast

Rub it with:

Cut clove of garlic

Butter

Sprinkle it with:

1-1/2 teaspoons salt

1/4 teaspoon pepper

A pinch of cayenne

Place the uncovered roast in a 325 degree oven. Cook 20-30 minutes per pound.

Deer Liver on a Stick

Liver, cut in pieces 1-1/2 inches square, 1/2 inch thick

Slab bacon, cut 1-1/2 inch squares, 1/4 inch thick

Quartered onion
Six-inch skewers

Impale the pieces on the skewers; first liver, then bacon, onion, more liver and so on. Sprinkle with salt and pepper. Heat 1/2-inch of oil in a skillet, and lay filled skewers in. Don't overcook. Lift often to check the underside. When one side is brown, turn and cook the other side until done. Remove from the pan and serve. No need to call your pals; they'll be there waiting when it's done.

Venison Swiss Steak

2 pounds deer steaks, cut 1-1/2 inches thick
Flour
Cooking oil
3 onions
1 stalk celery
1 cup tomatoes
2 tablespoons Worcestershire sauce
Salt and pepper

Dredge the steaks in flour, and season with salt and pepper. Then brown them in enough oil to coat the bottom of a skillet. When brown on both sides, add the remaining ingredients. Cover tightly, and cook in a 350 degree oven or over a low flame on top of the stove until tender, about 1-1/2 hours. Or, if you wish, after browning the steaks, place all the ingredients in a crockpot, and cook at low heat for 8-10 hours.

Hunter's Stew

2 pounds venison, cut in 1-inch cubes
2 tablespoons butter
6 carrots, sliced
3 stalks celery, sliced
3 onions, cut in quarters
3 potatoes, cut in chunks
1 teaspoon salt
1/4 teaspoon pepper
1 teaspoon sugar
Water

Brown the meat in butter. Add the seasonings, and cover with water. Cover, bring to a boil and simmer for 1 to 2 hours or until the meat is tender. Add the vegetables, and continue cooking until tender, about 1/2 hour.

Smothered Venison Chops

6 deer chops
Cooking oil
1/2 cup chicken broth
1/4 cup soy sauce
2 tablespoons ketchup
1/4 cup honey
1/4 teaspoon ginger
1 clove garlic, minced

Brown the chops in hot oil. Mix the remaining

ingredients, and pour over the chops. Cover and cook over low heat 30 to 45 minutes or until tender.

Venison Loin and Mushrooms

1 boned venison loin
Freshly ground pepper
3/4 cup butter
1/4 cup beef broth
1-1/2 cups thinly sliced onions
1-1/2 cups mushrooms

Preheat the oven to 450 degrees. Place the loin in a roasting pan, and brush with 1/2 cup melted butter. Season with pepper, and heat in the oven for 15 minutes. Reduce the heat, and continue to roast and baste, turning the meat occasionally. For a medium rare roast, allow 15 minutes cooking time per pound of meat.

When the loin is almost done, melt the remaining butter in a skillet, and lightly saute the onions and mushrooms together. When the roast is done, remove it to a heated platter, and pour beef broth on the bottom of the roaster. On top of the stove, heat the pan on high, and scrape up any of the baked-on drippings, and stir to blend. Add to the mushrooms and onions, and serve over warm, sliced venison.

Easy Baked Brisket

1 venison brisket, about 3 pounds
1 tablespoon flour
1 oven cooking bag
Pepper
1 10-1/2 ounce can onion soup
1 cup sliced carrots
1 cups sliced potatoes

Preheat the oven to 350 degrees. Put the flour in the cooking bag, and turn to coat all sides of the bag. Place the bag in a roasting pan, season the brisket, and place the meat, soup and vegetables in the bag. Close the bag as directed, and poke a few holes in the top of the bag to allow steam to escape. Cook for 1 to 1-1/2 hours or until done.

Venison Jerky

Venison sliced in long, thin strips
Your favorite marinade with a little salt added

Jerky can be made from any cut of venison, but many people prefer to "jerk" the less tender cuts and scraps. Cutting the meat across the grain makes it more tender than cutting with the grain.

Marinate the strips overnight. Stick toothpicks through each strip, and hang them from the oven rack so the strips don't touch each other. Cook at 140 degrees for 10-12 hours. You can also jerk the meat in a smoker. Use a low heat fire with lots of smoke for five hours.

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Injury During Unnecessary Surgery

J. Kelley Avery, M.D.*

Case Report

The patient, a 55-year-old woman, presented her internal medicine physician with a long history of cardiovascular disease that included three documented myocardial infarctions. The history further revealed episodes of "palpitations" during some of which she would experience spells of weakness and near syncope, causing her to have to sit or lie down. She had had no heart failure, and was found to have good ventricular function. She was a 20-plus year smoker and continued to indulge her habit even after the three myocardial infarctions.

The spells of weakness were thought to be clinically significant, and a 24-hour Holter monitor study was done, which revealed some premature contractions. During the test, the patient said that she experienced some weakness and chest tightness, but they were not associated with rhythm abnormalities.

She was referred to a cardiologist for consultation, where she continued to describe episodes of weakness not associated with effort. During these spells she frequently felt as if her "heart was running away," but it was her impression that this association was not always present. During the episodes, she had no pain or shortness of breath. The attacks were very bothersome to her, and at times frightening. She told her family physician that she felt she was going to "fall out."

Within a month of onset of the spells the patient was admitted to the hospital for angiography, which revealed an aberrant right subclavian artery that had a moderate stenosis. There was also severe focal stenosis of the left subclavian artery proximal to the origin of the left vertebral artery. On the right, there was mild atherosclerotic stenosis of the internal carotid artery, and there was severe stenosis at the origin of the right external carotid artery. The intracranial circulation appeared normal.

She was referred to a cardiovascular surgeon for

an opinion as to the possibility of a surgical approach to the correction of her weak spells. A study in the non-invasive vascular laboratory there demonstrated significant stenosis in the external and internal carotid arteries.

On the basis of these studies, the diagnosis of subclavian steal syndrome was made as the explanation for what the surgeon called her "drop spells." She signed an informed consent document that emphasized the possibility of bleeding, infection, heart problems, and death, and she affirmed that she understood the risks and agreed to the surgery.

The procedure consisted of a bypass between the left carotid and subclavian arteries by the use of a Gore-Tex graft, and took just over two hours. The patient recovered from the anesthetic without incident, but within a few hours there was unmistakable evidence of some injury to the brachial plexus on the side of the operation. The resident, who was assisting the surgeon, remembered that during the operation he thought that the retractor went too deep, and the surgeon repositioned the blade. The operation continued.

Thorough studies proved that there was injury/severance of the nerve roots of the left C-5 and C-6 nerves distal to the long thoracic branch, which was found to be intact. Three months after the surgery, the patient was admitted to the hospital with neck pain, tachycardia, and syncope. She was shown not to have had any cardiac muscle damage, and the conclusion was that a bout of ventricular tachycardia was causing her symptoms. One wonders if it was this kind of event that produced the complaints of weakness, near syncope, etc.

The operating surgeon referred the patient to a clinic nationally known for the treatment of injuries of this kind to explore every possibility for treatment. The patient returned with the story that the examining physician informed her that her cardiac condition would not tolerate the surgery necessary to attempt repair of the injury, in addition to the fact that the repair did not have a real good chance of success. Ac-

* Dr. Avery is Chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Co., Brentwood, TN. This article appeared in the *Journal of the Tennessee Medical Association* in January 1998. It is reprinted here with permission.

cording to the patient, the consultant also told her in no uncertain terms that the surgery done on the vessels in her neck was unnecessary and would only have increased the flow of blood to her arm, thus creating the possibility of making her complaint worse.

A lawsuit was filed charging that the indications for the surgery were exaggerated, and that the surgery was negligently performed, causing the injury to the brachial plexus and the resulting disability.

Loss Prevention Comments

The phenomenon of subclavian steal is very uncommon. It occurs when there is some stenosis in the subclavian artery proximal to the origin of the vertebral artery on the same side. Hemodynamically, this can cause a reversal of flow in the vertebral artery resulting in ischemia to the brain stem which can result in falling, loss of consciousness, etc. It can be demonstrable angiographically.

The injury to the brachial plexus was apparently due to damage from the blade of the retractor used in the surgery. Both the surgeon and the assisting resident agreed that this was most likely the case. The consulting neurosurgeon closed the door of hope for the patient and opened the door for a medical malpractice lawsuit, which had already been mentioned by the patient before she went for the consultation.

Remembering to include in the informed consent process every possible thing that could go wrong is not reasonable or necessary and had that been the only basis for the charge of negligence, defense would have been difficult but possible. The charge that the surgery was not indicated by the clinical facts proved to be exceedingly difficult to defend. Experts were not to be found that would testify that the surgery was necessary. The surgeon himself seemed to agree that the indications for the operation were stretched. Settlement was necessary to close this unfortunate case. ■

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Cardiology Commentary and Update

Jack McKee, M.D.*
Mark St. Pierre, M.D.*
J. David Talley, M.D.*

Acute Coronary Syndromes: New Medications Improve Prognosis

Unstable angina pectoris and non-Q-wave myocardial infarction (MI) are leading causes for hospital admission in the United States. While the mortality rate of patients with acute (ST-segment elevation) MI has been cut by nearly 30%, there has been little, if any, improvement in the management of patients with unstable angina pectoris or non-Q-wave MI.¹ Research over the past few years, however, has added new classes of medications for use in these patients with unstable angina pectoris and non-Q-wave MI which can improve prognosis. This review focuses on these advancements.

Patient Presentation

History. A 51-year-old male had a history of systemic arterial hypertension and coronary artery disease (see complete problem list, Table 1) presented to his local hospital with prolonged chest discomfort unrelieved with sublingual nitroglycerin. He was admitted to the CCU and started on heparin, intravenous nitroglycerin, and beta blockade in addition to his daily aspirin. His cardiac enzymes were positive for MI and he was transferred to our tertiary care center for further evaluation and management.

His past medical history was significant for MI earlier in the year at which time he received thrombolytic therapy. His hospital course was complicated by lower extremity compartment syndrome following thrombolysis requiring fasciotomy. He quit smoking

cigarettes in 1966 and did not use ethanol. His only medications were daily aspirin and sublingual nitroglycerin as needed for chest pain.

Physical and Laboratory Examination. There was no jugular venous distention, carotid bruits, or

Table 1: Complete Cardiac Diagnosis

Etiology:	Atherosclerotic coronary artery disease Systemic arterial hypertension
Anatomy:	Cardiac catheterization; Left main coronary artery 30% mid stenosis. Left anterior descending 70% stenosis after second diagonal. Second diagonal 80% ostial stenosis. Left circumflex 99% mid stenosis with TIMI 1 flow. Right coronary artery (dominant) 95% mid stenosis.
Physiology:	ECG shows normal sinus rhythm with normal axis. ST segment depression leads II, III, aVF, V4-V6. Left ventriculography ejection fraction > 55%.
Functional:	Class III-IV
Objective:	Severe coronary artery disease

thyromegaly. His chest was clear to auscultation and his cardiac examination was normal. He had a well healed scar on his left lower extremity but had no peripheral edema and the pulses were equal.

The electrolytes and complete blood count were normal. Serial troponin I values from the referring hospital were 0.7ng/ml, 4.2ng/ml, and 3.8ng/ml. The electrocardiogram showed normal sinus rhythm with persistent 1-2mm ST segment depression in the inferior standard leads and lateral precordial leads. There were no pathologic Q-waves (Figure 1).

* Drs. McKee, St. Pierre and Talley are with the Division of Cardiology at UAMS.

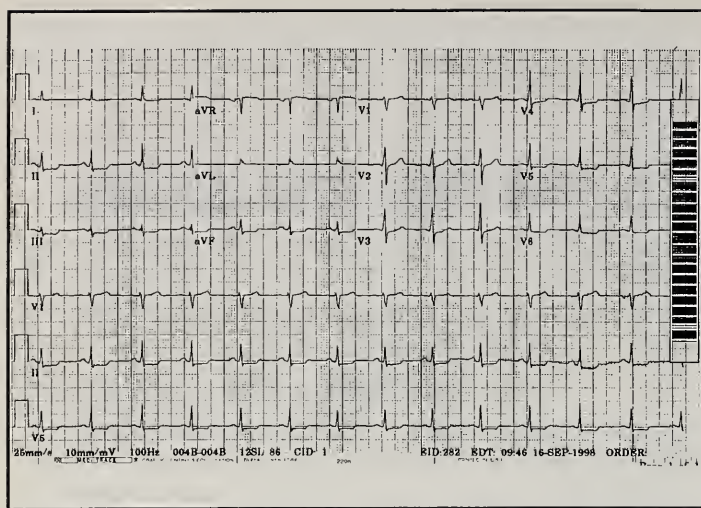


Figure 1: ECG shows normal sinus rhythm, rate 79, with normal axis. ST-segment depression is seen in the inferior and lateral leads (II, III, aVF, V4-V6).

Hospital Course. After transfer, heparin, aspirin, and intravenous nitroglycerin were continued. In the CCU, he was given a bolus of eptifibatide (Integrilin™, Cor Therapeutics, South San Francisco, CA, USA) 180 µg/kilogram and started on a maintenance infusion of 2.0 µg per kilogram/minute. The following day, coronary angiography revealed severe, diffuse multiple vessel coronary artery disease with normal left ventricular systolic function and wall motion. Coronary artery bypass graft surgery was preformed and the postoperative course was uneventful.

Discussion

Natural History of Unstable Angina Pectoris. There are few prospective natural history studies which define the long term outcomes of patients with unstable angina pectoris without MI. In 1981, Mulcahy and colleagues reported results from a study of 100 consecutive patients admitted with unstable angina pectoris.² Sublingual nitroglycerin was the only routine medication. After 28 days, four patients (4%) died and nine patients (9%) had sustained a non-fatal MI. After 12 months, twenty four patients (24%) had either died or sustained a non-fatal MI. More recently, the Thrombolysis in Myocardial Infarction (TIMI) IIIB investigators reported a 1% incidence of death and a 5% incidence of non-fatal MI at 42 days of follow-up in patients with unstable angina pectoris treated with aspirin, heparin, and beta and calcium-blocking agents.³ After 12 months of treatment, nearly 10% of the patients had sustained either death or a non-fatal MI.⁴

Natural History of Unstable Angina Pectoris or Non-Q-wave MI. The natural history of patients who present with either unstable angina pectoris or a non-Q-wave MI is more easily defined. Multiple studies report that death or non-fatal MI occurs in 15-20% after six months of treatment in patients who present with either unstable angina pectoris or non-Q-wave MI. This event rate has changed little in the past two decades. This

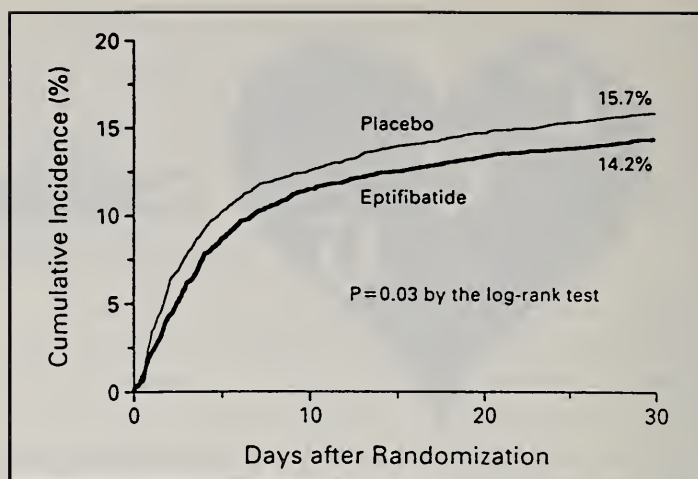


Figure 2: The use of eptifibatide in patients with unstable angina pectoris or non-Q-wave myocardial infarction dramatically reduced the occurrence of death or non-fatal myocardial infarction assessed 30 days after treatment. From: The PURSUIT Trial Investigators. Inhibition of platelet glycoprotein IIb/IIIa with eptifibatide in patients with acute coronary syndromes. *N Engl J Med* 1998;339:436-443.

finding underscores the need for incorporating new drug regimens as standard of care in the treatment of acute coronary syndromes.

Diagnosis

The diagnosis of unstable angina pectoris and non-Q-wave MI includes clinical and electrocardiographic findings, as well as biochemical markers of myocardial necrosis. For unstable angina pectoris, most studies require chest discomfort and electrocardiographic changes suggestive of ischemia (ST segment changes) without elevation of biochemical markers to suggest MI. The distinction between unstable angina pectoris and non-Q-wave MI is thus dependent upon elevation of serum markers for myocardial injury. Creatine kinase-MB isoenzyme (CK-MB) was the first serum marker used in the diagnosis of myocardial necrosis that is relatively cardiac specific.⁵ It became available for use in the early 1970s, and since then has become widely used. In the late 1980s, an assay for troponin I was developed which would increase the specificity of serum markers of myocardial injury and necrosis. Troponin I is one component of the troponin complex found in cardiac muscle which serves to regulate the force of cardiac contraction. Troponin I is found exclusively in cardiac muscle and is not found in the serum under normal conditions.⁶ In addition to its specificity for acute coronary syndromes, troponin I also offers useful prognostic information. In patients with unstable angina pectoris or non-Q-wave MI who present more than six hours after onset of chest pain with a troponin I value >0.4ng/ml have a significant risk of death in the immediate future. Moreover, there is a direct relationship between mortality rates and increasing troponin I levels in these patients.⁷

Table 2: Key Results from the PRISM and PRISM-PLUS trials using Tirofiban

	PRISM			PRISM-PLUS			
	Aspirin + Tirofiban	Aspirin + Heparin	p Value	Aspirin + Tirofiban	Aspirin + Tirofiban + Heparin	Aspirin + Heparin	p Value
N =	1616	1616		345	773	797	
Primary Endpoint:							
Death, MI, refractory ischemia	3.8%+	5.6%+	0.007	*	12.9%**	17.9%**	0.004
Relative Risk Reduction		36%			34%		
Components of the Primary Endpoint:							
Death	0.4%	0.2%	0.54	*	1.9%	1.9%	ns
MI	0.9%	1.4%	0.19	*	3.9%	7.0%	0.006
Refractory ischemia	3.5%	5.3%	0.017	*	9.3%	12.7%	0.022
Secondary Endpoints at 30 days:							
Death, MI, Refractory ischemia	15.9%	17.1	0.44	*	18.5%	22.3%	0.039

Abbreviations: MI = myocardial infarction; PRISM = Platelet Receptor Inhibition for Ischemic Syndrome management; PRISM-PLUS = Platelet Receptor Inhibition for Ischemic Syndrome Management in Patients limited to Very Unstable Signs and Symptoms

Notes: + at 48 hours; * tirofiban only arm terminated early by Data and Safety Monitoring Committee due to increase in the occurrence of death and MI (p = 0.004); ** at 7 days

New Directions in Management

Currently, standard therapy for the treatment of unstable angina pectoris or non-Q-wave MI includes the use of unfractionated heparin, aspirin, nitrates, beta and calcium-blocking medications. New agents for the treatment of unstable angina pectoris or non-Q-wave MI include low-molecular weight heparins (LMWHs) and glycoprotein IIb/IIIa platelet inhibitors.

Low-molecular weight heparins. Since 1995, LMWHs have been studied in patients with unstable angina pectoris or non-Q-wave MI. As compared to unfractionated heparin, LMWHs provide a more predictable anticoagulation, less heparin-induced thrombocytopenia and no requirement for repeated measurements of anticoagulation.

The results of these trials have been mixed, depending upon the particular LMWH used, variations in dosing, and duration of follow-up.⁸ The most encouraging results were reported in the Efficacy and Safety of Subcutaneous Enoxaparin in Non-Q-Wave Coronary Events (ESSENCE) trial.⁹ In ESSENCE, 3171 patients with unstable angina pectoris or non-Q-wave MI were randomly assigned to receive either enoxaparin 1 mg/kg subcutaneously twice daily, or a bolus of unfractionated heparin followed by continuous infusion. After 14 days of treatment, 17% of patients in the enoxaparin group sustained either death, MI, or recurrent angina pectoris compared to 20% in the unfractionated heparin group (p = 0.02). This benefit was maintained at 30 days (enoxaparin 20%, unfractionated heparin 23%, p=0.02, and at one year (enoxaparin 32%, unfractionated heparin 35.7%, p = 0.022). Disappointingly, there was no difference in

death or MI alone at 48 hours, 14 days, and 30 days, between the two groups.

Glycoprotein IIb/IIIa Platelet Inhibitors. The glycoprotein IIb/IIIa receptor is found on the platelet surface and acts as the final common pathway for platelet aggregation in response to tissue injury and circulating platelet activators. There are now three commercially available platelet glycoprotein IIb/IIIa receptor inhibitors used clinically (Abciximab, ReoPro™, Eli Lilly & Co., Indianapolis, IN, USA), Eptifibatide, and Tirofiban (Aggrestat™, Merck & Co., Philadelphia, PA, USA). The efficacy of these agents in patients with unstable angina pectoris or non-Q wave MI is now established.¹⁰

ABCIXIMAB. Based on pilot trial data, the Chimeric 7E3 Antiplatelet Therapy in Unstable Angina Refractory to Standard Treatment (CAPTURE) trial was designed to evaluate the efficacy of abciximab when added to intensive triple drug therapy (aspirin, heparin, nitrates) in patients who presented with unstable angina pectoris and were candidates for percutaneous coronary intervention.^{11,12} Importantly, randomization occurred after the diagnostic cardiac catheterization. The addition of abciximab to this medical regiment decreased the occurrence of death, MI, or need for urgent repeat intervention within 30 days to 10.8% compared to 16.4% with standard treatment alone, p = 0.0064.

EPTIFIBATIDE. Recently, the results of the Platelet Glycoprotein IIb/IIIa in Unstable Angina pectoris: Receptor Suppression Using Integrilin Therapy (PURSUIT) Trial were published.¹³ This was a double-blind, placebo controlled, randomized trial comparing a bolus and infusion of eptifibatide for up to 96 hours versus

placebo in patients with unstable angina pectoris or non-Q-wave MI. The primary end point was the occurrence of death or nonfatal MI up to 30 days after treatment was begun. As compared to the placebo group, those patients randomized to receive an eptifibatide bolus and infusion had a significant reduction in the composite end point of death and nonfatal MI at 96 hours (1.2% vs. 0.9% respectively, $p=0.01$), which remained significant at 30 days (15.7% vs. 14.2%, $p = 0.04$, Figure 2).

TIROFIBAN. Tirofiban was evaluated in two trials of patients who presented with unstable angina pectoris or non-Q wave MI. The enrollment criteria for both the Platelet Receptor Inhibition for Ischemic Syndrome Management (PRISM) and the Platelet Receptor Inhibition for Ischemic Syndrome Management in Patients limited to Very Unstable Signs and Symptoms (PRISM-PLUS) were quite similar.^{14,15} All patients had chest discomfort consistent with myocardial ischemia within 24 hours of presentation, documented ECG changes or elevated cardiac enzymes, or a history of coronary heart disease. All patients received aspirin unless contraindicated.

The results of PRISM and PRISM-PLUS are similar (Table 2). In PRISM, patients who received aspirin and tirofiban dramatically reduced the occurrence of death, MI, or refractory ischemia compared to heparin. In PRISM-PLUS, there was a 34% decrease in the occurrence of the combined endpoint of death, MI, or refractory ischemia at seven days when tirofiban was added to aspirin and heparin. Tirofiban proved to be remarkably safe. There was no statistically significant increase in the occurrence of major bleeding or development of thrombocytopenia tirofiban compared with heparin.

Conclusion

Unstable angina pectoris and non-Q-wave MI are among the most common diagnoses in hospitalized patients. Although great advances have been made in the management of patients who present with an acute MI, there has been little improvement in the care of patients who present with unstable angina pectoris or non-Q-wave MI. However, in the past few years the door has been opened for significant improvements in medical therapy alone and as a bridge to revascularization in these patients. It has also apparent that with more sensitive methods of diagnosing myocardial injury and necrosis, more patients are candidates for treatment and subsequent benefit. Although LMWHs and IIb/IIIa platelet receptor inhibitors have

demonstrated improved outcomes in patients with acute coronary syndromes, they are not intended for individual treatment, but rather as a component of an overall management strategy.

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State Health Watch

Information provided by the Arkansas Department of Health, Division of Epidemiology

Leading Causes of Death Among Arkansans Age 15-24

Death rates among Arkansans age 15-24 from unintentional injuries, homicide, and suicide have changed little over the past decade, accounting for over 78% of all deaths in 1996. Seventy-three percent of all deaths from unintentional injuries were due to motor vehicle crashes, with males accounting for 68% of these deaths.

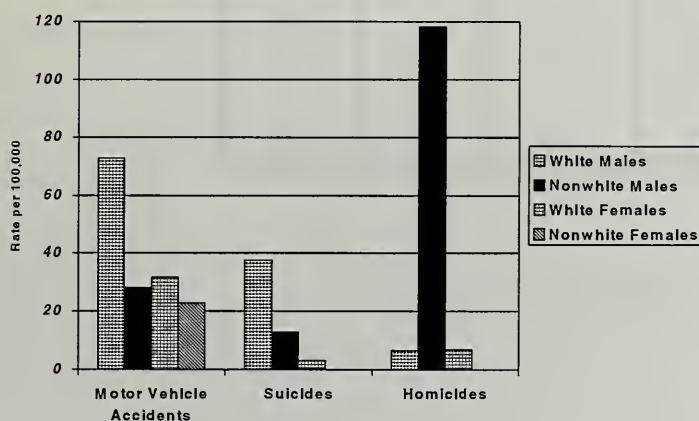
Contributing to the relatively high level of motor vehicle mortality statistics is the use of alcohol by adolescents. Drivers between the ages of 16 and 20 who were involved in fatal crashes were more likely than

any other age group to be alcohol impaired.

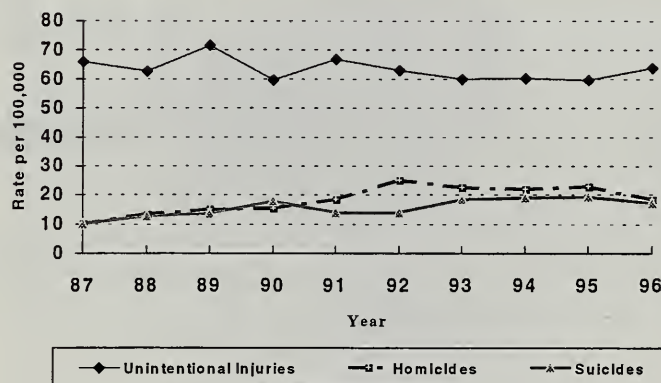
Twenty-nine percent of all deaths in 1996 among Arkansas youth and adolescents age 15-24 were due to homicide. Non-white males accounted for 71% of these deaths. Among youth aged 15-24, homicide is the leading cause of death for African-American males (118 per 100,000), almost 20 times higher than white males (6.5 per 100,000).

In 1996, suicide was the third leading cause of death among Arkansas youth and adolescents age 15-24, eighty-three percent occurring among white males.

Leading Causes of Death Among Arkansans Age 15-24
by Race and Gender, 1996



Leading Causes of Death Among Arkansans
Age 15-24, 1987-1996



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Reported Cases of Selected Diseases in Arkansas Profile for August 1998

The three-month delay in the disease profile for a given month is designed to minimize any changes that may occur due to the effects of late reporting. The numbers in the table reflect the actual disease onset date, if known, rather than the date the disease was reported.

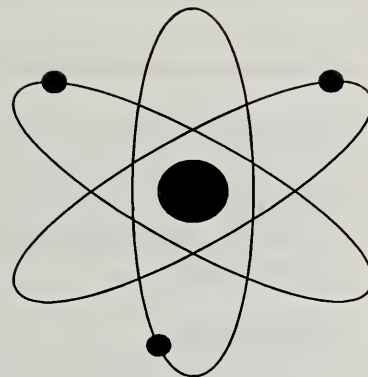
Disease Name	Total Reported Cases YTD 1998	Total Reported Cases YTD 1997	Total Reported Cases YTD 1996	Total Reported Cases 1997	Total Reported Cases 1996
Campylobacteriosis	117	119	165	175	241
Giardiasis	108	146	99	220	182
Salmonellosis	336	272	284	445	455
Shigellosis	138	157	88	273	176
Hepatitis A	73	172	332	223	500
Hepatitis B	70	67	65	106	93
Hepatitis C	3	4	7	5	7
Meningococcal Infections	25	26	28	38	35
Viral Meningitis	48	16	25	26	38
Ehrlichiosis	11	21	6	22	7
Lyme Disease	6	22	25	27	27
Rocky Mtn Spotted Fever	19	30	17	31	22
Tularemia	17	19	20	24	24
Measles	0	0	0	0	0
Mumps	7	1	1	3	1
Gonorrhea	N/A	N/A	N/A	4388	5050
Syphilis	N/A	N/A	N/A	394	706
Pertussis	52	30	6	60	14
Tuberculosis	78	123	126	200	225

N/A - Not available at time of printing.

For a listing of reportable diseases in Arkansas,
call the Arkansas Department of Health, Division of Epidemiology, at (501) 661-2893.

Radiological Case of the Month

Steven R. Nokes, M.D., Editor



Author

Ronald C. Walker, M.D.

History:

A 60-year-old male presented with a history of radical prostatectomy two years ago for prostate cancer. He did not receive radiation or hormone therapy. His PSA (prostate surface antigen) is currently 1.1 (mildly elevated). A bone scan and CT scan of the chest, abdomen, and pelvis were normal. A Prostatecint scan was obtained (figures 1 and 2).

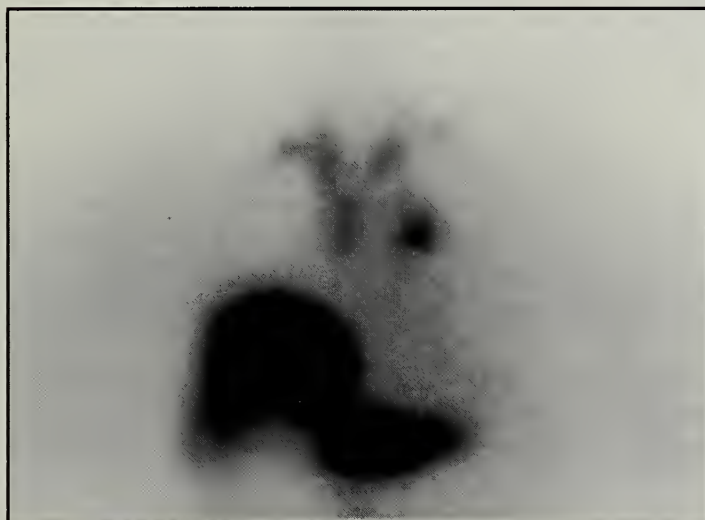


Figure 1

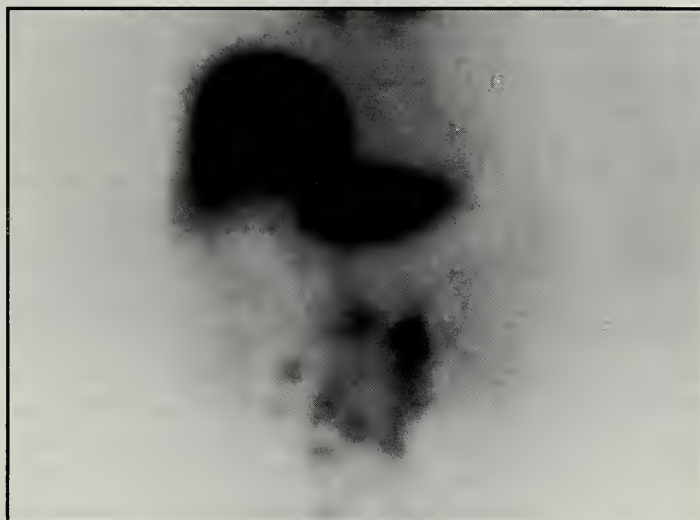


Figure 2

Figures: Prostatecint scans of the chest (figure 1), and abdomen/pelvis (figure 2).

Metastatic Prostate Cancer

Diagnosis: Metastatic Prostate Cancer.

Findings:

Multiple areas of abnormal tracer accumulation are present in the chest, abdomen, and pelvis. Normal tracer is seen in the liver.

Discussion:

Prostascint is an IgG monoclonal antibody to PMSA (prostate specific membrane antigen). Not all prostate malignancies express PSA, but almost all (over 95%) express PMSA. The Prostascint scan is unreliable in the liver due to normal liver uptake, and is inferior to the bone scan for evaluation of metastatic disease to the skeletal system.

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Editor: Steven R. Nokes, M.D., Radiology Consultants in Little Rock.

Author: Ronald C. Walker, M.D., Radiology Consultants in Little Rock.



In Memoriam

Alfred B. Hathcock, M.D.

Dr. Alfred B. Hathcock of Fort Smith died Thursday, October 1, 1998. He was 67. He is survived by his wife of 40 years, Barbara Jean Hathcock; his son, Dr. Stephen Allen Hathcock of Little Rock; his daughter, Lisa Ann Klusmeier of Fort Smith; his four grandchildren, Cathryn Ann of Fort Smith, Andrew Walter of Fort Smith, William Jacob Klusmeier of Fort Smith and Samuel Huddleston Hathcock of Little Rock; his brother, Charles Nelson Hathcock of Batesville.

Charles R. Henry, Sr., M.D.

Dr. Charles R. Henry, Sr., of Little Rock died Saturday, September 12, 1998. He was 92. He is survived by his wife of 57 years, Marguerite Keller Henry; one son, Dr. Reid Henry and his wife, Susan of Little Rock; two daughters, Elsa Crocker and her husband, Charles of Little Rock, and Kate Allen of Fayetteville; a sister, Jewel Wolfe of Sarasota, Fla.; and three grandchildren, Maggie and Charles Crocker and Lee Allen.

Dr. Henry was president of the Arkansas Medical Society in 1951.

J. Kenneth Thompson, M.D.

Dr. J. Kenneth Thompson, of Santa Barbara, Calif., formerly of Fort Smith, died Friday, September 4, 1998. He was 87. He is survived by three daughters, Dana Thompson Istre of Lompoc, Calif., Jill Thompson Harper of Santa Barbara and Kay Thompson Lee of Memphis, Tenn.; and four grandchildren.



New Members

CONWAY

France, Diane P., Family Practice. Medical Education, University of Wisconsin Medical School, Madison, 1982. Internship, LaCrosse, 1983. Residency, UAMS, 1998. Board certified.

FORT SMITH

De La Rosa, Raymond E., Endocrinology. Medical Education, University of the Philippines, Manila, 1989. Internship/Residency, Lutheran Medical Center, 1993/1998. Board pending.

Johnson, Arthur Morris, Neurosurgery. Medical Education, University of Mississippi School of Medicine. Internship/Residency, Tulane University, New Orleans, Louisiana, 1993. Residency, Emory University, Atlanta, Georgia, 1991. Board certified.

GREEN FOREST

Rose, Steve, Family Practice. Medical Education, UAMS, 1995. Board certified.

HEBER SPRINGS

Lister, Dan G., General Surgeon. Medical Education, UAMS, 1993. Internship/Residency, Marshall University, Huntington, West Virginia, 1994/1998.

HOT SPRINGS

Dodd, Lawrence Daniel, Orthopedic Surgery. Medical Education, UAMS, 1993. Internship, Methodist Hospital, Memphis, Tennessee, 1994. Residency, Campbell Clinic, Memphis, Tennessee, 1998. Board eligible.

Raney, Jerel Lee, Emergency. Medical Education, Vanderbilt University School of Medicine, Nashville, Tennessee, 1995. Internship/Residency, UAMS, 1996/1998.

LITTLE ROCK

Day, David W., Pediatric Ophthalmology. Medical Education, University of South Dakota School of Medicine, Vermillion, 1990. Internship, McKennan Hospital, Sioux Falls, South Dakota, 1991. Residency, University of Pennsylvania, Scheie Eye Institute, 1994. Board certified.

Magnes, Scott Alan, Orthopedic Surgery. Medical Education, University of Iowa College of Medicine, Iowa City, 1985. Residency in Orthopedic Surgery, 1997. Board certified.

Marotti, Alfred Scott, General Surgery. Medical Education, UAMS, 1992. Internship/Residency, UAMS,

1993/1998. Board eligible.

Ramanathan, Sundar Raman, Internal Medicine. Medical Education, St. Johns Medical College, India, 1993. Internship, St. Johns Medical College, India, and UAMS, 1995. Residency, UAMS, 1998. Board pending.

Singh, Baldev, Pulmonary. Medical Education, Armed Forces Medical College, India, 1984. Internship/Residency, University of Medicine and Dentistry, Newark, New Jersey, 1992/1994. Board certified.

Taylor, Ken M., Obstetrics/Gynecology. Medical Education, Southwestern Medical School, Dallas, Texas, 1978. Internship, The City of Memphis Hospital/University of Tennessee at Memphis, 1979. Residency, University of Tennessee Medical Center at Memphis, 1982. Board certified.

RUSSELLVILLE

Helms, William John, Dermatology. Medical Education, UAMS, 1992. Internship, UAMS, 1993. Residencies, UAMS, 1995, and Case Western, Cleveland, Ohio, 1998. Board pending.

SALEM

Phillips, Rebecca Plumlee, Family Practice. Medical Education, UAMS, 1995. Internship/Residency, UAMS-AHEC, Pine Bluff, 1996/1998. Board certified.

RESIDENTS

Aidod-Akama-Makia, Jennifer Adwowa, Family Medicine. Medical Education, UAMS, 1998. Internship, UAMS.

Ballard, Devon R., Family Medicine. Medical Education, UAMS, 1993. Internship, UAMS.

Escarda, Joe O., Physical Medicine & Rehabilitation. Medical Education, University of Santo Tomas, Metro Manila, Philippines, 1974. Internship, UAMS, 1998. Residency, UAMS.

Harris, Patricia K., Pediatrics. Medical Education, University of Alabama School of Medicine, Birmingham, 1992. Internship, UAMS, 1993. Residency, UAMS.

Hollis, Thomas Henry, Jr., Family Medicine. Medical Education, UAMS, 1997. Internship/Residency, AHEC-NE, Jonesboro.

Hutcheson, Belinda Ann, Pediatrics. Medical Education, UAMS, 1998. Internship, Arkansas Children's Hospital.

Kligman, Svetlana, Physical Medicine & Rehabilitation. Medical Education, Kishinev State Medical Institute, Kishinev, Moldova, 1981. Internship, UAMS.

STUDENTS

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Robbie C. Baker
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Christine Lee Ann Boutzale
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Arkansas Medical Society Publications

The AMS Membership Directory

A quick and easy guide to AMS physician members, the directory provides addresses, phone and fax numbers, specialties and E-mail addresses. Plus other health related information. The directories are printed each year in late July.

The directories are \$50 each. With a purchase of 2 to 10, \$45 each; 11 or more, \$35 each. (*Note: All AMS members receive one free directory through the mail immediately after publication in August of each year.*)

The AMS's Physician's Legal Guide

A compilation of state and federal laws affecting the practice of medicine in Arkansas, this guide is 170 pages on topics such as medical records, patient abandonment, medical board regulations, Antitrust Law, Workers' Compensation, & much more. The List Price is \$100.00. **AMS Member Price is \$70.00.**

The Journal of the Arkansas Medical Society

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Things To Come

December 12, 1998

Contemporary Management of Acute Myocardial Infarction. Washington University Medical Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

March 29 - April 1, 1999

11th Annual National Managed Health Care Congress. Georgia World Congress Center, Atlanta, Georgia. For more information, call 888-882-2500.

April 23 - 24, 1999

Oncology in the New Millennium. The Ritz-Carlton Hotel, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

April 23 - 30, 1999

58th Annual American Occupational Health Conference. Ernest N. Morial Convention Center, New Orleans, Louisiana. Sponsored by the American Col-

lege of Occupational and Environmental Medicine. For more information, call 847-228-6850 extension 180; FAX: 847-228-1856; Internet: <http://www.acoem.org>

May 1 - 6, 1999

American Society of Colon and Rectal Surgeons Annual Meeting/Celebrating the Society's 100 Year Anniversary. Washington, D.C. For more information, call 847-290-9184; FAX: 847-290-9203; Website: <http://www.fascrs.org/>

May 19 - 21, 1999

Peripheral Artery Disease: Contemporary Strategies for Diagnosis and Therapy. Heart House Learning Center, Bethesda, Maryland. Sponsored by the American College of Cardiology. For more information, call 800-253-4636 ext. 652 or FAX: 301-897-9745

June 7 - 9, 1999

Approach to Advanced Heart Failure: Medical and Surgical Options. Heart House Learning Center, Bethesda, Maryland. Sponsored by the American College of Cardiology. For more information, call 800-253-4636 ext. 652 or FAX: 301-897-9745

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the high standards of medicine*

The Arkansas Medical Society is a statewide organization that represents all physicians, regardless of specialty, location or type of practice.

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**November 21-22, 1998
1998 AMS Fall Meeting
Red Apple Inn, Heber Springs**



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Keeping Up

Recurring Education Programs

The following organizations are accredited by the Arkansas Medical Society to sponsor continuing medical education for physicians. The organizations named designate these continuing medical education activities for the credit hours specified in Category 1 of the Physician's Recognition Award of the American Medical Association.

FAYETTEVILLE-VA MEDICAL CENTER

Medical Grand Rounds/General Medical Topics, Thursdays, 12:00 noon, Auditorium, Bldg. 3

FAYETTEVILLE-WASHINGTON REGIONAL MEDICAL CENTER

*Chest Conference, 1st Wednesday of every month, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Grand Rounds Conference, 3rd Wednesday of every month, 7:30 - 8:30 a.m., Baker Conference Center, breakfast provided.
Primary Care Conferences, every Monday, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Tumor Conference, every Thursday, 7:30 - 8:30 a.m., WRMC, Baker Conference Center, no fee, breakfast provided*

HARRISON-NORTH ARKANSAS MEDICAL CENTER

Cancer Conference, October 22, November 3, and December 22, 12:00 noon, Conference Room

HOT SPRINGS-ST. JOSEPH'S REGIONAL HEALTH CENTER

*Cancer Conference, every Monday, 12:15 p.m., St. Joseph's Mercy Room.
Chest Conference, Quarterly on last Tuesday of month beginning November 24, 12:15 p.m., St. Joseph's Mercy Room.
Grand Rounds, 2nd Tuesday each month, 12:00 noon, St. Joseph's Mercy Room. Lunch provided.
Medicine Not So Grand Rounds, dates vary, 12:15 p.m., St. Joseph's Mercy Room.*

LITTLE ROCK-ST. VINCENT INFIRMARY MEDICAL CENTER

*Cancer Conferences, Thursdays, 12:00 noon, Southwestern Bell/Arkla room. Lunch provided.
General Surgery Grand Rounds, 1st Thursday, 7:00 a.m. Southwestern Bell/Arkla Room. Light breakfast provided.
Interdisciplinary AIDS Conference, 2nd Friday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Journal Club, Tuesdays, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Pulmonary Conference, 4th Wednesday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.*

LITTLE ROCK-BAPTIST MEDICAL CENTER

*Breast Conference, 3rd Thursday, 7:00 a.m., J.A. Gilbreath Conference Center
Gastroenterology/Surgery Journal Club, dates vary, AR Gastroenterology Memorial Medical Plaza, Suite 3A. Call 501- 202-2673 or 202-3888 for more information.
Grand Rounds Conference, Wednesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Pulmonary Conference, Tuesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Sleep Disorders Case Conference, dates vary, 12:00 noon. Call 202-2673 for date and location. Lunch provided.*

MOUNTAIN HOME-BAXTER COUNTY REGIONAL HOSPITAL

*Lecture Series, 3rd Tuesday, 6:30 p.m., Education Building
Tumor Conference, Tuesdays, 12:00 noon, Carti Boardroom*

The University of Arkansas College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor the following continuing medical education activities for physicians. The Office of Continuing Medical Education designates that these activities meet the criteria for credit hours in category 1 toward the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

LITTLE ROCK-ARKANSAS CHILDREN'S HOSPITAL

*Faculty Resident Seminar, 3rd Thursday, 12:00 noon, Sturgis Auditorium
Genetics Conference, Wednesdays, 1:30 p.m., Conference Room, Springer Building
Infectious Disease Conference, 2nd Wednesday, 12:00 noon, 2nd Floor Classroom
Pediatric Grand Rounds, Tuesdays, 8:00 a.m., Sturgis Bldg., Auditorium
Pediatric Neuroscience Conference, 1st Thursday, 8:00 a.m., 2nd Floor Classroom
Pediatric Pharmacology Conference, 5th Wednesday, 12:00 noon, 2nd Classroom
Pediatric Research Conference, 1st Thursday, 12:00 noon, 2nd Floor Classroom*

LITTLE ROCK-UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

*ACRC Multi-Disciplinary Cancer Conference (Tumor Board), Wednesdays, 12:00 noon, ACRC 2nd floor Conference Room.
Anesthesia Grand Rounds/M&M Conference, Tuesdays, 6:00 a.m., UAMS Education III Bldg., Room 0219.
Autopsy Pathology Conference, Wednesdays, 8:30 a.m., VAMC-LR Autopsy Room.
Cardiology-Cardiovascular & Thoracic Surgery Conference, Wednesdays, 11:45 a.m., UAMS, Shorey Bldg., room 3S/06
Cardiology Grand Rounds, 2nd & 4th Mondays, 4:00 p.m., UAMS Shorey Bldg., 3S/06
Cardiology Morning Report, every morning, 7:30 a.m., UAMS, Shorey Bldg. room 3S/07
Cardiothoracic Surgery M&M Conference, 2nd Saturday each month, 8:00 a.m., UAMS, Shorey Bldg. room 2S/08
CARTI/Searcy Tumor Board Conference, 2nd Wednesday, 12:30 p.m., CARTI Searcy, 405 Rodgers Drive, Searcy.*

Centers for Mental Healthcare Research Conference, 1st & 3rd Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research

CORE Research Conference, 2nd & 4th Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research

Endocrinology Grand Rounds, Fridays, 12:00 noon, ACRC Bldg., Sam Walton Auditorium, 10th floor

Gastroenterology Grand Rounds, Thursdays, 4:00 p.m., UAMS Hospital, room 3D29 (1st Thurs. at ACH)

Gastroenterology Pathology Conference, 4:00 p.m., 1st Tuesday each month, UAMS Hospital

GI/Radiology Conference, Tuesdays, 8:00 a.m., UAMS Hospital, room 3D29

In-Vitro Fertilization Case Conference, 2nd & 4th Wednesdays each month, 11:00 a.m., Freeway Medical Tower, Suite 502 Conf. rm

Medical/Surgical Chest Conference, each Monday, 4:00 p.m., UAMS Hospital, room M1/293

Medicine Grand Rounds, Thursdays, 12:00 noon, UAMS Education II Bldg., room 0131

Medicine Research Conference, one Wednesday each month, 4:30 p.m. UAMS Education II Bldg. room 0131A

Neuropathology Conference, 2nd Wednesday each month, 4:00 p.m., AR State Crime Lab, Medical Examiner's Office

Neurosurgery, Neuroradiology & Neuropathology Case Presentations, Thursdays, 4:00 p.m., UAMS Hospital

OB/GYN Fetal Boards, 2nd Fridays, 8:00 a.m., ACH Sturgis Bldg.

OB/GYN Grand Rounds, Wednesdays, 7:45 a.m., UAMS Education II Bldg., room 0141A

Ophthalmology Problem Case Conference, Thursdays, 4:00 p.m., UAMS Jones Eye Institute, 2 credit hours

Orthopaedic Basic Science Conference, Tuesdays, 7:30 a.m., UAMS Education II Bldg., room B/107

Orthopaedic Bibliography Conference, Tuesdays, Jan. - Oct., 7:30 a.m., UAMS Education II Bldg.

Orthopaedic Fracture Conference, Tuesdays, 9:00 a.m., UAMS Education II Bldg., room B/107

Orthopaedic Grand Rounds, Tuesdays, 10:00 a.m., UAMS Education II Bldg., room B/107

Otolaryngology Grand Rounds, 2nd Saturday each month, 9:00 a.m., UAMS Biomedical Research Bldg., room 205

Otolaryngology M&M Conference, each Monday, 5:30 p.m., UAMS Otolaryngology Conf. room

Perinatal Care Grand Rounds, every Tuesday, 12:15 p.m., BMC, 2nd floor Conf. room

Psychiatry Grand Rounds, Fridays, 11:00 a.m., UAMS Child Study Center Auditorium

Surgery Grand Rounds, Tuesdays, 8:00 a.m., ACRC Betsy Blass Conf.

Surgery Morbidity & Mortality Conference, Tuesdays, 7:00 a.m., ACRC Betsy Blass conference room, 2nd floor

NLRVA Geriatric/Medicine Grand Rounds, Thursdays, 8:00 a.m., VAMC-NLR, Bldg 68, room 130

VA Medical Service Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D109

VA Pathology-Hematology/Oncology-Radiology Patient Problem Conference, Thursdays, 8:15 a.m., VAMC-LR, room 2E142

VA Psychiatry Difficult Case Conference, 4th Monday, 12:00 noon, VAMC-NLR, Mental Health Clinic

VA Lung Cancer Conference, Thursdays, 3:00 p.m., VAMC-LR, room 2E142

VA Medical Service Teaching Conference, Thursdays, 8:00 a.m., VAMC-NLR, Bldg. 68 room 130

VA Medicine-Pathology Conference, Tuesday, 2:00 p.m., VAMC-LR, room 2D109

VA Medicine Resident's Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D08

VA Physical Medicine & Rehab Grand Rounds, 4th Friday, 11:30 a.m., VAMC-NLR Bldg. 68, room 118 or Baptist Rehab Institute

VA Surgery Grand Rounds, Thursdays, 12:45 p.m., VAMC-LR, room 2D109, 1.25 credit hours

VA Topics in Rehabilitation Medicine Conference, 2nd, 3rd, & 4th Thursdays, 8:00 a.m., VAMC-NLR Bldg. 68, room 118

VA Weekly Cancer Conference, Monday, 3:00 p.m., VAMC-LR, room 2E-142

White County Memorial Hospital Medical Staff Program, once monthly, dates & times vary, White County Memorial Hospital, Searcy

EL DORADO-AHEC

Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., Warner Brown Campus, 6th floor Conf. Rm.

Behavioral Sciences Conference, 1st & 4th Friday, 12:15 p.m., AHEC - South Arkansas

Chest Conference, 3rd Wednesday, 12:15 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.

Dermatology Conference, 1st Tuesdays and 1st Thursdays, AHEC - South Arkansas

GYN Conference, 2nd Friday, 12:15 p.m., AHEC-South Arkansas

Internal Medicine Conference, 1st, 2nd & 4th Wednesday, 12:15 p.m., AHEC-South Arkansas

Noon Lecture Series, 2nd & 4th Thursday, 12:00 noon, Union Medical Campus, Conf. Rm. #3. Lunch provided.

Obstetrics-Gynecology Conference, 4th Thursday, 12:15 p.m., AHEC - South Arkansas

Pathology Conference, 2nd Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5. Lunch provided.

Pediatric Conference, 3rd Friday, 12:15 p.m., AHEC - South Arkansas

Pediatric Case Presentation, 3rd Tuesday, 3rd Friday, AHEC - South Arkansas

Surgical Conference, 1st, 2nd & 3rd Monday, 12:15 p.m., AHEC - South Arkansas

Tumor Clinic, 4th Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5, Lunch provided.

VA Hematology/Oncology Conference, Thursdays, 8:15 a.m., VAMC-LR Pathology conference room 2E142

FAYETTEVILLE-AHEC NORTHWEST

AHEC Teaching Conferences, Tuesdays & Wednesdays, 12:00 noon, AHEC Classroom

AHEC Teaching Conferences, Fridays, 12:00 noon, AHEC Classroom

AHEC Teaching Conferences, Thursdays, 7:30 a.m., AHEC Classroom

Medical/Surgical Conference Series, 4th Tuesday, 12:30, Bates Medical Center, Bentonville

FORT SMITH-AHEC

Grand Rounds, 12:00 noon, first Wednesday of each month, Sparks Regional Medical Center

Neuroradiology Conference, 1st Tuesday of each month, 12:00 noon, Sparks Regional Medical Center, 7th floor dining room

Neuroscience & Spine Conference, 3rd Wednesday each month, 12:00 noon, St. Edward Mercy Medical Center

Tumor Conference, Mondays, 12:00 noon, St. Edward Mercy Medical Center

Tumor Conference, Wednesdays, 12:00 noon, Sparks Regional Medical Center

JONESBORO-AHEC NORTHEAST

AHEC Lecture Series, 1st & 3rd Tuesday, 12:00 noon, Stroud Hall, St. Bernard's Regional Medical Center. Lunch provided.
Arkansas Methodist Hospital CME Conference, 7:30 a.m., Hospital Cafeteria, Arkansas Methodist Hospital, Paragould
Chest Conference, 2nd Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Citywide Cardiology Conference, 3rd Thursday, 7:30 p.m., Jonesboro Holiday Inn
Clinical Faculty Conference, 5th Tuesday, St. Bernard's Regional Medical Center, Dietary Conference Room, lunch provided
Craighead/Poinsett Medical Society, 1st Tuesday, 7:00 p.m. Jonesboro Country Club
Greenleaf Hospital CME Conference, monthly, 12:00 noon, Greenleaf Hospital Conference Room. Lunch provided.
Independence County Medical Society, 2nd Tuesday, 6:30 p.m., Batesville Country Club, Batesville
Interesting Case Conference, 4th Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Jackson County Medical Society, 3rd Thursday, 7:00 p.m., Newport Country Club, Newport
Kennett CME Conference, 3rd Monday, 12:00 noon, Twin Rivers Hospital Cafeteria, Kennett, MO
Methodist Hospital of Jonesboro Cardiology Conference, every other month, 7:00 p.m., alternating between Methodist Hospital Conference Room and St. Bernard's, Stroud Hall. Meal provided.
Methodist Hospital of Jonesboro CME Conference, 2nd Tuesday, 7:00 p.m., Cafeteria, Methodist Hospital of Jonesboro
Neuroscience Conference, 3rd Monday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch Provided.
Orthopedic Case Conferences, every other month beginning in January, 7:30 a.m., Northeast Arkansas Rehabilitation Hospital
Perinatal Conference, 2nd Wednesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Piggott CME Conference, 3rd Thursday, 6:00 p.m., Piggott Hospital. Meal provided.
Pocahontas CME Conference, 3rd Wednesday, 12:00 noon & 7:30 p.m., Randolph County Medical Center Boardroom
Tumor Conference, Thursdays, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Walnut Ridge CME Conference, 3rd & last Tuesday, 12:00 noon, Lawrence Memorial Hospital Cafeteria
White River CME Conference, 3rd Thursday, 12:00 noon, White River Medical Center Hospital Boardroom

PINE BLUFF-AHEC

Behavioral Science Conference, 1st & 3rd Thursday, 12:00 noon, Jefferson Regional Medical Center
Chest Conference, 2nd & 4th Friday, 12:00 noon, Jefferson Regional Medical Center
FP Journal Club, 2nd Monday, 12:00 noon, Jefferson Regional Medical Center
Internal Medicine Conference, 2nd & 4th Thursdays, 12:00 noon, Jefferson Regional Medical Center
Obstetrics/Gynecology Conference, 2nd Tuesday, 12:00 noon, Jefferson Regional Medical Center
Orthopedic Case Conference, 2nd & 4th Wednesdays, 12:00 noon, Jefferson Regional Medical Center.
Pediatric Conference, 3rd Wednesday, 12:00 noon, Jefferson Regional Medical Center
Radiology Conference, 3rd Tuesday, 12:00 noon, Jefferson Regional Medical Center
Southeast Arkansas Medical Lecture Series, 4th Tuesday, 6:30 p.m., Locations vary. Dinner meeting.
Tumor Conference, 1st Wednesday & 3rd Friday, 12:00 noon, Jefferson Regional Medical Center

TEXARKANA-AHEC SOUTHWEST

Chest Conference, every other 3rd Tuesday/quarterly, 12:00 noon, St. Michael Health Care Center
Neuro-Radiology Conference, 1st Thursday every month at St. Michael Health Care Center and 3rd Thursday of every month at Wadley Regional Medical Center, 12:00 noon.
Residency Noon Conference, Monday, Wednesday, Thursday, Friday each week, alternates between St. Michael Health Care Center & Wadley Regional Medical Center
Tumor Board, Fridays, except 5th Friday, 12:00 noon, Wadley Regional Medical Center & St. Michael Hospital
Tumor Conference, every 5th Friday, 12:00 noon alternates between Wadley Regional Medical Center & St. Michael Hospital



Continuing Medical Education Contacts:

*The following is a list of telephone numbers physicians
can call for more information on CME activities*

Little Rock
Arkansas Medical Society
501-224-8967

Fayetteville
VA Medical Center
501-444-5050

Fayetteville
Washington Regional
Medical Center
501-442-1823

Harrison
North Arkansas
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870-365-2098

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501-620-1420

Hot Springs
St. Joseph's Regional
Health Center
501-622-1024

Little Rock
St. Vincent Infirmary
Medical Center
501-660-3592
or 501-660-3594

Little Rock
Baptist Medical Center
501-202-2673

Mountain Home
Baxter County
Regional Hospital
870-424-1760

Little Rock
Arkansas Children's
Hospital
501-320-1248

Little Rock
UAMS
501-661-7962

El Dorado
AHEC
870-862-2489

Fayetteville
AHEC
501-521-8260

Fort Smith
AHEC
501-785-2431

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REFERENCES

References should be limited to ten; if more than ten are listed, the author(s) may designate the ten most significant to be printed and readers will be referred to the author(s) for the complete list. References must contain, in the order given: name of author(s), title of article, name of periodicals with volume, page, month and year. References should be numbered consecutively in the order in which they appear in the text. Authors are responsible for reference accuracy.

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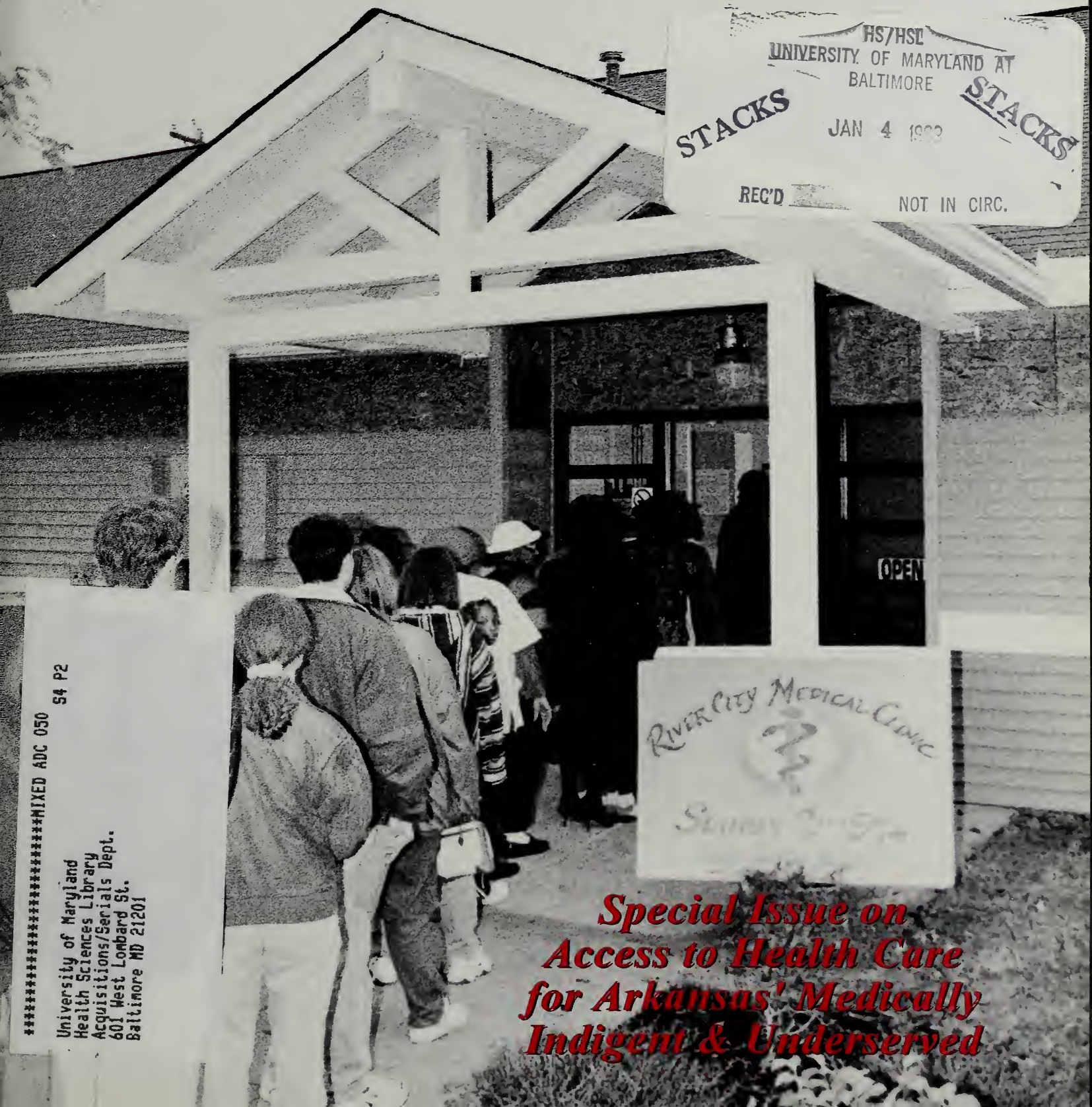
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Volume 95 Number 7

December 1998



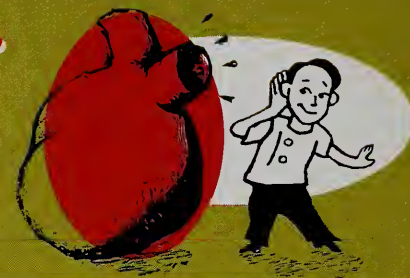
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*Award-Winning Journal of the Arkansas Medical Society
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Cover photos of River City Church and Medical Clinic in North Little Rock were taken by Little Rock photographer Steve Asmussen. Special thanks to Benny Bittle, church minister, and to participants of the photo who were at River City for either church or medical services or both.

The Only Answer to the Dilemma of the Health Care Industry: *Total Emphasis on Rural Health Care in America*

Robert H. Fiser, Jr., M.D.*

The Institute of Medicine's National Roundtable recently issued a statement on the urgent need to improve health care quality, concluding that quality of care, not managed care, is the problem.¹

Current efforts to improve quality of care will not succeed unless we completely and systematically overhaul how we deliver health care services, educate and train clinicians, assess both, and improve quality. These issues are even more important to rural communities that face significant community health problems and the loss of medical care facilities.

In this issue of *The Journal of the Arkansas Medical Society* we see evidence of various organizations' attempts to improve access to medical services for the indigent and underserved in both rural and urban areas. In this editorial, I would like to propose and discuss a new health care delivery model that magnifies the traditional love and respect of physicians while incorporating technologies of the future. A solution will require a creative approach utilizing information technology to develop an integrated delivery network that brings patients, providers and payers into a trusting relationship with each other. This model can be developed in rural areas more effectively than in cities. In my opinion, a rural solution can help alleviate urban problems, but not the reverse. Sadly, most research and data are obtained from large urban areas, often on the two coasts, and do not apply readily to rural Arkansas. Even in our state, the problems of Little Rock, Jonesboro and Fort Smith are often removed from those of Helena, Morrilton and Mountain View. However, there is much more cooperation in rural areas because of lack of competition among hospitals and because physicians often have more say in hospitals and community affairs. As an example, Wal-Mart has been extremely successful in utilizing this basic approach of "high tech information" for sales and distribution, primarily focused in rural areas.

How can this approach help physicians in rural

Arkansas? As a rule of thumb, 60% of medical care leaves a rural community and 40% stays. We can assume that if these percentages were reversed in Phillips County with the use of this model, it would mean 10,000,000 additional dollars for the county. These monies are not new dollars, but are redistributed from Little Rock and Memphis. A monetary incentive of this magnitude would ensure that new physicians and services from urban areas would relocate to Phillips County. It would also cause concern to physicians and institutions in larger cities. However, change will inevitably occur because the emphasis in health care is shifting from hospitals to clinics, local communities and home health. I have called this system change the AAA Model for health care reform: Accessible, Accountable and Affordable health care. Physicians must provide the leadership for this movement, as they are the only individuals who have the ethical and legal responsibility for medical care. This system is designed to support the family physicians of rural America. Instead of a top-down approach, this grass roots effort of physician-patient responsibility decries the fact that specialists and large care organizations do not respond to individual needs.

The following approach to developing an integrated delivery network is divided into three segments: the effects on patients, providers and payers.

This approach is based on two main points: 1) A regional care network requires an effective regional information network, and 2) To be effective, a regional information network requires a regional care network. The entire system is based on the use of clinically based information technology. Perhaps we can paraphrase, "It's the information technology, stupid!"

Accessibility/Patients/Empowerment: We need to develop a series of community care centers (CCC). Such a center is patient oriented and helps provide self-empowerment. It brings community resources together in a cooperative venture. Schools, churches and mental health facilities all function as a "rural hospital without walls." The CCC utilizes the Co-Mend concept of community outreach with an emphasis on

* Dr. Fiser is Assistant Vice Chancellor for Regional Programs and Professor of Pediatrics at UAMS.

medicine, education, nutrition and development of the child, family and community. This information center will expand medical day care, for young and old, and will be flexible enough to fill in gaps of care, particularly for patients with chronic disease. The center would provide universal access to preventative care in the local community and access to restorative care as close to home as possible. By utilizing large relational databases and Internet access, it would offer patients, complete and accurate information for holistic patient care and provide community based outcome research, thus ensuring both patient and physician satisfaction. Security and confidentiality can be maintained through a variety of technologies. By providing both convenient and consistent care, the CCC would enhance the community portion of the Integrated Delivery Network.

Accountability/Providers/Quality: Providers would be responsible for quality control in this endeavor by developing specific aims and goals for the community. The data utilized for this approach would be obtained through a community interactive database that provides patient-specific goals utilizing dynamic and constantly updated practice guidelines. It could provide a confidential report card to document aims and progress as well as provide practice patterns and variation. This would not be "cookbook medicine" or bring the shadow of Big Brother over the community, but would develop a local consensus regarding underuse, overuse or abuse of medical care. It would be professional friendly and provide alerts and reminders, further enhancing patient care. Accountable aims and goals could include the number of low birth weight infants born, vaccination rates, alcohol and drug abuse, farm accidents, polypharmacy (especially for the elderly) and more appropriate usage of antibiotics.

Although some may be concerned with this accountability, its proper use would lead to more autonomy and individual authority. In essence, this technology would function as the perennial chief resident visualized in the security and sanctity of your own office. It would provide a more consistent practice pattern while enhancing physician-patient relationships, greatly enhancing peer reviews in a cooperative rather than a confrontational manner.

Affordability/Payers/Efficiency: If accessibility and accountability are prioritized, by most accounts, medical care should be more affordable by stressing preventative, appropriate and efficient care. In this system, most administrative information would be derived from clinical data. Enormous savings would result since there would be minimal fraud or complex coding practices, thus cutting administrative expenses.

A new organization of care could be developed, called PHC, (Physicians, Hospitals and Community Organization) similar to farmers' co-ops. In fact, we

need a Riceland Foods for physicians. Respect and trust result from open and candid sharing of information. In the past, power was derived from keeping information hidden; in the future, power will develop from organizations that enhance information flow to encourage cooperation and judicious use of resources. This approach will also insure better business practices by outsourcing business data management. The PHC could be used to develop a county self-insurance pool. Today in Arkansas, all children up to age 18 and citizens of 65 and older are covered for comprehensive and catastrophic care by Medicaid, ARKids First, private insurance and Medicare. Thus, the young and the old are covered, the age groups that receive most of the expensive care. The group from 18 to 65 is largely healthy and accounts for a large portion of uninsured. What is lacking is catastrophic coverage, which could be bought inexpensively with a high deductible or re-insurance for this population group. The major beneficiaries of this PHC county self-insured pool would be the small businessman who should be able to buy coverage like the large corporations. Tertiary coverage would be obtained by negotiations between the rural PHC and over-bedded urban hospitals with significant savings and clout.

While this approach to medical care would be of major benefit to rural areas, it is not being implemented in those areas of our country. It will not attempt to duplicate most of the present efforts that have been described as "engineers attempting to break the sound barrier by tinkering with a Model T Ford".¹ The legislature was supportive enough of the concept to appropriate several million dollars to implement this model in a few sites across the state. However, to this date, the monies have not been authorized by the Governor's Office. In fact, this approach flies in the face of institutions and beneficiaries who feel comfortable with the status quo. However, the time to change is at hand. Inevitably, a whole new industry will develop in which health care will be totally focused on the management of health care information. As Peter Drucker has stated, "the best way to predict the future is to create your own future."

We need to be the first state in the U.S. to form a new standard of care and change our health care system to one that offers higher quality at more affordable prices. Remember a continuum of data plus context equals information, and information and experience equal knowledge. We can all help by describing the context from which data is derived and sharing our wisdom and experience with technology partners to develop the proper knowledge for the benefit of our patients.

Reference:

1. JAMA, September 16, 1998, Vol 280, No 11, "The Urgent Need to Improve Health Care Quality."

Medicine in the News

Health Care Access Foundation

As of November 1, 1998, the Arkansas Health Care Access Foundation has provided free medical service to 14,657 medically indigent persons, received 27,779 applications and enrolled 54,004 persons. This program has 1,930 volunteer health care professionals including medical doctors, dentists, hospitals, home health agencies and pharmacists. These providers have rendered free treatment in 69 of the 75 counties.

Medicare Launches Pilot of New Beneficiary Complaint Alternatives - Testing to Take Place in Six States

In an attempt to ensure that seniors are consistently receiving the highest quality care, the Health Care Financing Administration, the governmental agency which oversees the Medicare program, has selected CMRI (California Medical Review, Inc.) to lead a six-state pilot project to develop, test and evaluate three new alternatives to handling beneficiary quality-of-care complaints. The pilot was awarded to

CMRI, the peer review organization (PRO) for California, last August and will be completed July 31, 1999. Joining CMRI in conducting the pilot are the PROs from Arkansas, Arizona, New York, North Carolina and South Dakota.

"The current system of handling Medicare beneficiary complaints has some flaws which undermine its effectiveness," says Charlene Harrington, Ph.D., RN, of the University of California-San Francisco and a lead consultant for the pilot. "By identifying these flaws and correcting them, the system is better able to ensure that seniors receive the highest quality of care."

The pilot, which was jointly developed by CMRI and UCSF, will begin testing and collecting data on three alternative complaint modules this month. Module one, which will be tested in California and South Dakota, expedites and expands the data collection procedures and sources used by the current system. Module two, which will be tested only in California with subcontracting assistance from the Rand Corporation, creates a clear set of written review guidelines to be used to help determine such things as when a hospi-

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tal discharge is too early, when referrals should be made to specialists, and what constitutes inadequate and inappropriate care for certain clinical conditions. Module three, which will be tested in Arkansas, Arizona, California, New York and North Carolina, uses a trained mediator to resolve those complaints which may be amenable to resolution through both informal and formal mediation processes.

"We will be evaluating each module against the current system, as well as against the other modules based on its feasibility, outcome, effectiveness, timeliness and cost," explains Dr. Malcolm Parker, Medical Director for CMRI.

The first two modules will be tested using 30 randomly selected complaints from both fee-for-service and HMO complaints. For module three, 10 complaints will be selected for informal mediation and five will be selected for formal mediation interventions. In both cases, the samples will be complaints based on specific criteria and participation will be strictly voluntary.

CMRI is the federally funded, non-profit, health information and quality improvement organization charged with improving the quality of care received by California's nearly four million Medicare beneficiaries. CMRI's staff of physicians, nurses and experts in health communication and data analysis works with consumers, providers and beneficiaries to implement programs that impact the quality of care received. Anyone interested in more information can visit CMRI on the web at www.cmri-ca.org

Information provided by News Release from California Medical Review.

AMA Seeks to Join Suit Against Georgia Blue Cross/Blue Shield

On September 11, the AMA asked permission from the Fulton County Superior Court to intervene on behalf of Georgia physicians who are members of the AMA in a suit filed by the Medical Association of Georgia (MAG) against Blue Cross & Blue Shield of Georgia, Inc. for breach of contract. At stake is a change in the contract definitions that govern physician compensation. The standard contract between Georgia Blue Cross/Blue Shield and its provider physicians states that the physicians will be paid according to the uniform, customary and reasonable fees charged by physicians generally. Georgia Blue Cross/Blue Shield has, without physician consent, adopted rules and regulations that would calculate the payments according to fees received by physicians. AMA seeks to join the suit at the invitation of MAG as part of its ongoing campaign to correct the abusive use of physician contracts by managed care companies.

Information provided by AMA's newsletter, Federation Communicator's Weekly, dated the week of September 6, 1998.

Four Universities join AMA and Robert Wood Johnson Binge Drinking Study

The AMA issued a news release announcing that four more universities have joined the AMA and the Robert Wood Johnson Foundation's "Matter of Degree" program, a nationwide network of campus/community partnerships devoted to curbing binge drinking on college campuses. Joining the program are the University of Nebraska-Lincoln, Louisiana State University, Florida State University and the Georgia Institute of Technology, bringing the total of participating universities to ten. Nancy W. Dickey, M.D., welcomed the schools noting that they "recognize that binge drinking is a disruptive, destructive and victimizing practice that has no place at an institution of higher learning." The Matter of Degree program is a 7-year, \$10 million initiative to identify and address those factors in the environment that encourage students to drink to excess, such as cheap drink specials, sales of alcohol to minors and alcohol advertising that targets youth. In addition to reducing the incidence of high-risk drinking, the program focuses on promoting the rights of students who are negatively affected by their binge-drinking peers. Studies show that on one-third of campuses, more than half of the students are binge drinkers. Binge drinking is defined as 5 drinks in one session for men and 4 drinks for women.

Information provided by AMA's newsletter, Federation Communicator's Weekly, dated the week of September 6, 1998.

AMA President gets Internet Site

The AMA has created a "From the President" section on its web site to serve as the primary source on the Internet for news and information about the presidency of Nancy W. Dickey, M.D. Here, visitors will learn about Dr. Dickey's agenda, her viewpoints and her activities as she leads the AMA through 1998 and 1999. The site, which became operable in early September, provides an important strategic tool that allows Dr. Dickey and future AMA presidents for communicating messages to as wide an audience as possible. The "From the President" section of the AMA Web site can be found at <http://www.ama-assn.org/presiden.htm>

Information provided by AMA's newsletter, Federation Communicator's Weekly, dated the week of September 6, 1998.

Market Trends

*In a lawsuit brought by the California Medical Association of behalf of a number of physician groups, a California Superior Court has granted a petition to compel Blue Cross of California to accept class arbitration of complaints by physicians who allege that Blue Cross breached their contracts when it began unilaterally altering fee schedules in 1993. The ruling is im-

portant because it permits thousands of individual physician claims that would be too costly to bring individually to be brought in one action. In ruling for the physician, the judge rejected the Blues' argument that because the contract did not explicitly provide for class arbitration, the court had no authority to order it. Instead, the court held that the contracts were contracts of adhesion and therefore the court was required to interpret it most strongly against the Blues.

*The Department of Justice (DOJ) has filed a complaint in Delaware against the Federation of Physicians and Dentists (FPD), alleging that in its representation of virtually all orthopedic surgeons in the state, the

union and its physician members engaged in a conspiracy to reject fee decreases from Blue Cross and Blue Shield of Delaware and engaged in an organized and illegal boycott. While the union argues that all it did was try to facilitate discussions between individual physicians and the company, the DOJ (and the Blues) allege that the uniform response of the physicians indicates that the union was providing information to discourage the physicians from accepting the offer.

Information provided by AMA's newsletter, Federation Communicator's Weekly, dated the week of September 6, 1998.

AMS Newsmakers

Dr. Raymond Biondo, a retired physician of Sherwood, was one of three 1998 inductees into the Senior Arkansans Hall of Fame as announced by the State Department of Human Services Aging and Adult Services Division. The Senior Arkansans Hall of Fame honors older Arkansans who have improved the quality of life in the Natural State.

Dr. D. Bud Dickson, an El Dorado Orthopedic Surgeon in Sports Medicine, was one of three alumni of Southern Arkansas University who was recently honored with a Distinguished Alumni Award.

Dr. William E. Golden, a Little Rock physician of internal medicine, was recently re-elected President of the American Health Quality Association.

Dr. Dorothy LeBoeuf, a Pea Ridge family practitioner, was recently honored with the Woman of the Year Award by Washington Regional's Phases in Women's Health Service. Nominations were accepted from any woman of any occupation who resides in Northwest Arkansas and who has demonstrated leadership, achievements and dedication to the Northwest Arkansas community.

Dr. Michael Marsh, a Fort Smith ear, nose and throat surgeon, and Dr. Sue Tsuda, a Conway medical oncologist, were recently selected by their peers to be included in the fourth listing of "The Best Doctors in America." The book is published by Aiken, S.C.-based Woodward/White, Inc., and is based on a survey in which more than 35,000 doctors throughout the United States were asked to rate the clinical abilities of other doctors in their areas of specialization.

Dr. Joe Martindale, a general practitioner, was recently elected to the school board in Benton.

Dr. Robert Miller, a family practitioner, was recently elected Mayor of Helena.

Dr. Robert H. Nunnally, a Camden family practitioner, was recently honored for his community contributions with the W.E. Hussman Man of the Year Award at the Distinguished Service Awards Banquet sponsored by the Camden Noon Lions Club and Southern Arkansas University Tech.

Dr. Bill Scurlock, a retired physician of El Dorado, took third place in the Arkansas State Senior Olympics Basketball Shoot-Out held recently in Hot Springs.

Dr. Karl David Straub, a Little Rock endocrinologist, was recently appointed to an eight-year term on the Little Rock Water Commission.

The AMA Physician's Recognition Award is Awarded each month to physicians who have completed acceptable programs of continuing education. The AMS recipients for the month of October are: Floyd Gonzalez, De Queen; James Bishop Russell, Conway; Ronald Clark Walker, Little Rock; and Charles Floyd Wells, Morrilton.

Have you been elected
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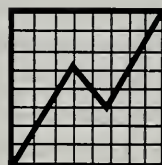
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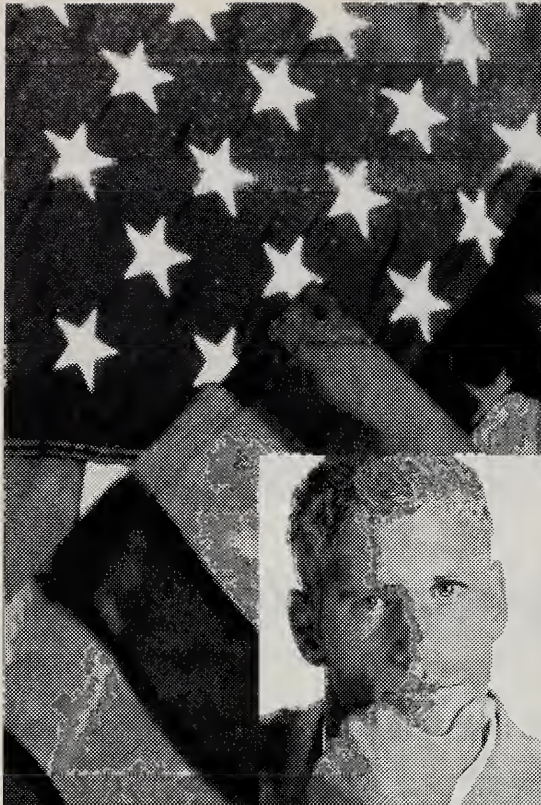
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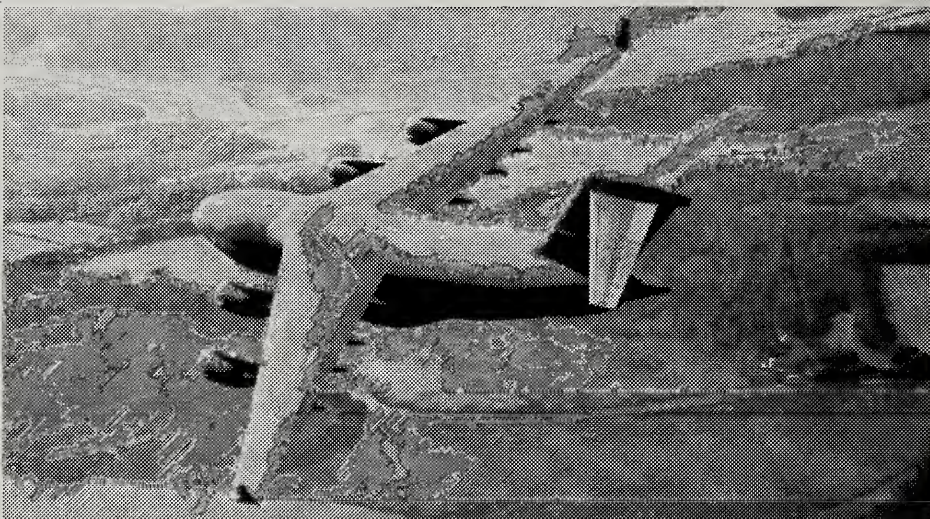
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Community Solutions for Access to Medical Care

Charles W. McGrew*

As control of the health care system continues to shift from communities to state, regional and national organizations, we do not have a very clear answer to the question of whether access to care has increased or decreased. What we do know, however, is that rural Arkansans are often confused by and frustrated with changes in their local system. Two programs currently being implemented in Arkansas have the potential to involve communities and local providers with increased input into how their system operates, more integration of public and private services, and an increased awareness of how to access the system.

The first program is funded by the Robert Wood Johnson Foundation (RWJF) and called Southern Rural Access. Eligibility is limited to eight southern states and includes Arkansas. The newly founded Arkansas Center for Health Improvement is the lead agency putting together the application to the RWJF for Arkansas. This Center was established with a mission of improving the health of Arkansans through policy research, professional education, program development and public advocacy.

The program will support efforts to increase the supply of primary care providers in rural underserved areas, strengthen the health care infrastructure and build capacity at the state and community level to address health care problems. Specifically, the Foundation is asking States to plan and implement programs that:

- develop a cadre of health-profession-students who are committed to becoming leaders in primary care in rural underserved areas;
- recruit and retain primary care providers;
- develop rural health networks; and
- use a revolving loan fund in support of their strategic plan.

While each of the elements provides exciting opportunities for Arkansas communities, the develop-

ment of rural health networks has the greatest potential for communities and local providers to influence both access and health system design and operation.

The Arkansas approach to network development was based on extensive input from rural citizens across the state. A series of both large and small stakeholder meetings were held from May to July of 1998 to obtain local input about problems of both access to health care and potential solutions. The Arkansas Center for Health Improvement conducted the meetings and then translated suggested solutions for identified problems into program components. This network component, based on local input, needed to:

- make patients and communities the focus of health care delivery;
- include those who are currently outside the existing health care systems (the poor and uninsured);
- change the system so that it is more user-friendly for patients;
- continually improve continuity and quality of services;
- link public and not-for-profit providers with traditional health system components;
- seek to prevent the occurrence of health problems, in addition to treating existing conditions; and
- focus on cost-effective uses of scarce health resources.

Through the Arkansas Community Health Network (ACHN) program, networks will receive matching funds that may be used to support a network director's salary for up to 3 years (75% salary support for Years 1 and 2, 60% for Year 3). Matching funds will be made available to help networks purchase an information system. Funds for travel of up to \$6,000 in Year 1 and \$3,000 in each of Years 2 and 3 may also be requested from the program. It is expected that network sites will be able to take over full responsibility of their directors' salary starting in Year 4. In Septem-

* Mr. McGrew is Director of the Section of Health Facility Services and Systems for the Arkansas Department of Health.

ber, an applicant workshop was held to discuss networks in general and the ACHN program and application process in more detail. This workshop was run by Arkansas Center for Health Improvement staff with participation by the Minnesota Center for Rural Health. These consultants, who will continue to provide technical assistance in network development throughout phase 1 of the Southern Rural Access Program, are also associated with the National Rural Health Resource Center. Terry Hill, Director of the Center for Rural Health, has worked at the local, state and national level to emphasize the need for true community involvement in and ownership of rural health networks. Among many factors affecting network success, particular emphasis was placed on community involvement, early and continuous involvement of community physicians and sustainability - realizing that a "perfect" community network would take time and only be achieved incrementally.

The second program emphasizing network development is Federal. As part of the Balanced Budget Act of 1997, Congress authorized the Medicare Rural Hospital Flexibility Program (MRHFP). The MRHFP creates the Critical Access Hospital (CAH), an acute care facility that provides outpatient, emergency and limited inpatient services and is a new provider type eligible for Medicare reimbursement.

This new authority is based on two programs: the Essential Access Community Hospital and Rural Primary Care Hospital (EACH/RPCH) program and the Montana Medical Assistance Facility (MAF) demonstration project. Each program successfully shows that States working with rural communities and providers could develop networks of limited-service hospitals and other providers, expand the supply of practitioners, improve the financial position of rural hospitals and

foster the integration of services to improve continuity and quality and avoid duplication.

Rural not-for-profit or public hospitals are eligible to convert to CAHs, which by definition may include up to 15 acute care beds and treat patients up to 96 hours. A CAH that participates in the swing bed program may maintain up to 25 beds, provided that no more than 15 of the beds are used for acute care at any one time. CAHs and at least one full-service hospital must be organized into rural health care networks and maintain agreements for patient referral and transfer, the development and use of communication systems and the provision of transportation services. The quality improvement program from the larger hospital must be linked directly to the CAH. CAHs are reimbursed by HCFA on a reasonable cost basis for inpatient and outpatient services provided to Medicare beneficiaries.

Arkansas is one of 15 states that has an approved state plan. In addition to Federal requirements, we require in our state plan that hospitals requesting designation go through a community planning process and be part of a network that is linked to other community providers and that EMS be included as an integral part of the network. Community Network expertise being developed for the Robert Wood Johnson Foundation, Southern Rural Access Program will be utilized to assist Arkansas hospitals converting to the CAH model. These two programs should complement each other and provide an opportunity for Arkansas communities and local providers of care to have greater involvement with the development and operation of rural health care systems.

For more information, call the Section of Health Facility Services and Systems at the Arkansas Department of Health at 501-661-2160. ■

Thought you might want to know...

"Cost is still the biggest problem in health care, even though health care inflation has retreated from the past double-digit increases. Health coverage is still simply too expensive for many small businesses and individuals. Each 1% increase in the cost of health coverage leads to 400,000 more uninsured Americans, according to the actuarial firm Lewin-VHI." *From an article titled "Patients have choice" by Thomas J. Donohue, President and CEO of the U.S. Chamber of Commerce. Article appeared in the USA Today on September 24, 1998.*

The time doctors give to charity care: About 7 of 10 doctors donate free or reduced-fee care for the poor. They devote about 7.2 hours a week on charity care, or 36 days a year. *Information provided by American Medical News, April 22-29, 1996.*

According to the 1998 Census Bureau report, an estimated 31.6% of the poor had no health insurance, despite the Medicaid program.

Arkansas Health Care Access Foundation Begins its Tenth Year of Helping Arkansans in Need

Pat Keller*

"You must give some time to your fellow man. Even if it's a little thing, do something for those who need help, something for which you get no pay but the privilege of doing it. For remember, you don't live in a world all your own. Your brothers are here too." Albert Schweitzer

Mission Statement: *Established in 1989, the Arkansas Health Care Access Foundation, Inc. is a volunteer-based medical referral program whose goal is to provide donated and low-cost medical care to Arkansas' low income, medically uninsured citizens, through a statewide network of volunteer medical professionals.*

Wow! It's been ten years since the Arkansas Medical Society, at the request of Arkansas legislators, began planning a program to help Arkansas' poor, medically uninsured gain access to medical care. With a lot of work by the Arkansas Medical Society and some of its most committed physicians and a number of interested legislators, the Arkansas Health Care Access Foundation was established. Funded with a two-year start-up from the Governor's Task Force on Indigent Care, the program is innovative and comprehensive, allowing doctors and other medical professionals to donate care from their offices. By avoiding the extra time and task of traveling and staffing "free clinics" in unfamiliar surroundings, more efficient care could be provided. There are now four states with this type of program, and we are proud to say that with our help South Carolina was able to establish a similar program. Also, Georgia has recently contacted us about advising them on establishing a similar program in their state and will come for a visit in January.

In addition to over 1,900 physician volunteers, Arkansas' program has grown to include support services donated by 91 hospitals, 142 dentists, 356 pharmacists, 40 home health agencies, as well as 80 prescription medications courtesy of Pfizer, Johnson & Johnson and SmithKline Beecham Pharmaceuticals. These medical professionals have provided approximately 15,000 documented visits and services. Additionally, many more donations of treatment were provided which went undocumented because these physicians saw patients for free follow up or referred patients to others for follow up without our knowledge.

* Pat Keller is Program Director of the Arkansas Health Care Access Foundation.

What a privilege it has been to work with such a professional and caring organization of health care professionals! Your valuable expertise and time have allowed us to meet the medical needs of some of the most desperately ill Arkansans. Our job of matching potential patients with a medical professional is challenging yet fulfilling. People who have gone years with undiagnosed illnesses and untreated symptoms or without appropriate medication have been helped by the program. Patients like Nancy would tell you that without your donation of an office visit, she might have become very sick before she knew she was a diabetic; and William would say that he wouldn't have been able to get any treatment for his confusion, dizziness and weakness until you donated a visit and tests. He would not have learned that he had suffered a stroke, nor would he have been able to take measures to prevent future strokes.

We know most physicians choose to donate their care in certain cases and are forced to write off a lot of care to others. One of our goals at the foundation is to continue to educate physicians about the growing need in our state and to encourage each physician to participate in the foundation's work by becoming a volunteer. Some physicians have seen as many as 100 patients over the past 9 years while others, particularly certain specialists, may not have received any referrals. If all would participate, the impact would be spread out so that most physicians would not notice.

If you have felt disappointed that you do not have time to help staff a "free clinic" or other medical program in your community and you would like to contribute your care to the indigent in our state, please take a moment to call me at 1-800-950-8233 or 501-221-3033. One of the wonderful things about participating is that neither you nor your staff will be required to fill out any special forms or do any extra paper work or reporting. We track referrals for you. To the 1,096 physicians and other medical professionals who have been participating these past years, I say "Thank You" for acting as a resource for thousands of Arkansans in need!

A Simple Idea that Helped Solve a Complex Medical Issue is now beginning its Tenth Year of Success!

"The idea was so simple, and it was right there in front of us. So, we put it into action..."
Ken LaMastus, Arkansas Medical Society Executive Vice President.

The uniqueness of the Arkansas Health Care Access Foundation (AHCAF) is that volunteer physicians are signed up to provide care for the indigent *from the physician's own clinic, during the physician's own clinic hours.*

AHCAF has been connecting Arkansas volunteer physicians and qualified patients for almost ten years now.

*Thank you, physician volunteers and AHCAF staff,
for making it possible and successful.*

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Measuring the Success of the Arkansas Health Care Access Foundation

Melissa Sawyer*

This report is an attempt to measure the effectiveness of the Health Care Access Program and to study the demographic elements of the patient population served. The study involved a two-pronged approach. By polling both physicians and patients regarding their experiences with AHCAF, we can form conclusions about its effectiveness. In addition, demographic information regarding patient make-up and physician participation in regional areas can serve as a resource for strategic management of the program.

Introduction

The Arkansas Health Care Access Foundation, Inc. (AHCAF) was founded in 1989 by the Arkansas Medical Society and the Arkansas State Legislature, with the help of Senator Knox Nelson and Representative Walter Day. Since that time, over 1,900 volunteers have signed up to work with the program, and over 54,000 individuals have been certified as eligible. Eligibility is based on two points: the patients must be below 100% of the Federal Poverty Level (See Figure 1), and they must be ineligible for Medicare, Medicaid or private insurance. Through the generous support and promotion of AHCAF by the Arkansas Medical Society, the Arkansas Hospital Association, the Arkansas Pharmacist's Association, Arkansas State Dental Association and the Arkansas Association of Home Health Agencies, patients have access to many services. Eligible patients may access care through physicians, pharmacies, dentists, hospitals, home health agencies and podiatrists. In addition, three major pharmaceutical companies participate: Pfizer, Johnson & Johnson and SmithKline Beecham.

Patients are certified for the program through their county Department of Human Services office or their local Public Health Unit. Once certified as eligible, clients have access to a statewide toll free number where they can be referred to a volunteer physician who has agreed to donate the initial office visit. AHCAF referrals are issued on a rotating basis within each county

to ensure no doctors are overloaded. While AHCAF stresses continuity of care, physicians may refer the patient back to AHCAF if they no longer have the ability to work with the patient. If other services are needed, such as testing at a hospital or referral to a specialist, AHCAF can usually secure these services. Many specialists are already active volunteers and hospitals are available on a case-by-case basis. In the same manner, AHCAF can secure visits with dentists or podiatrists and can usually get home health agencies to donate their initial work-up for patients.

Methodology

Statistical information regarding physician participation and areas of coverage was gleaned from the AHCAF database of over 1,900 providers. In addition, surveys were mailed to physicians and to patients. Participants for the survey were chosen at random and

Figure 1: Federal Poverty Levels (100%)

<u>Family Members</u>	<u>Gross Monthly Income</u>
1	\$670.83
2	\$904.17
3	\$1137.50
4	\$1370.83
5	\$1604.17
6	\$1837.50

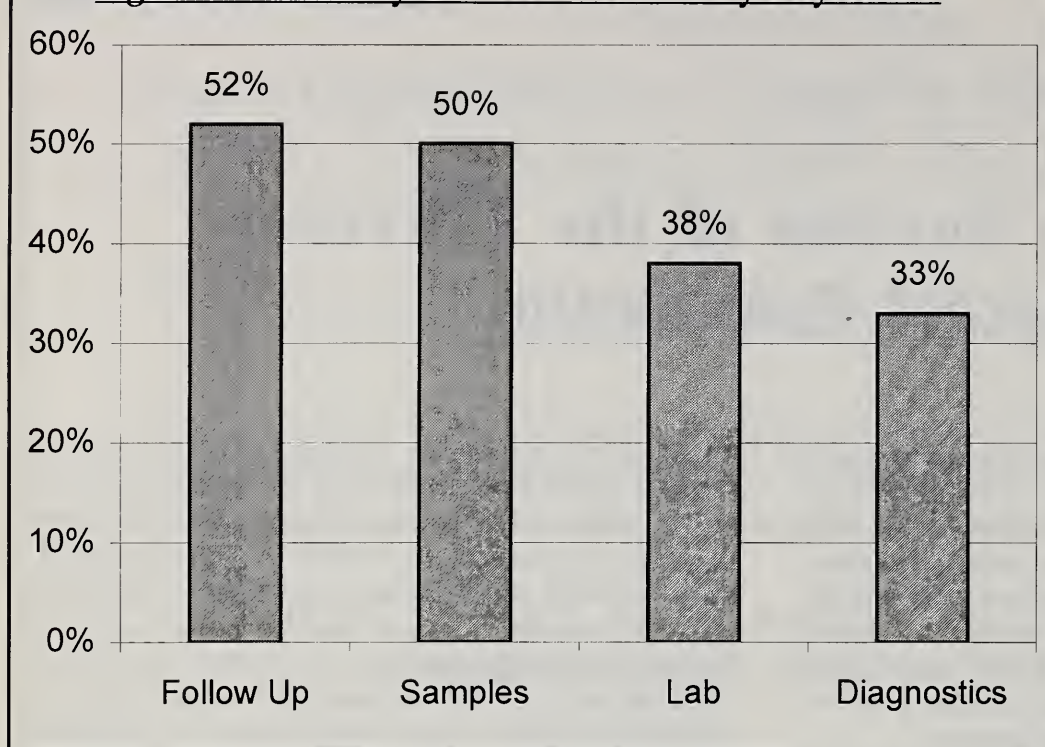
For each additional member, add \$233.00

Source: Arkansas Dept. of Human Services

were asked to complete a confidential questionnaire. For the physicians survey, 63 responses were received and tabulated (representing a 42% return on surveys mailed). Physicians were asked basic information regarding the number of patients they see per year and their estimates of the dollar amount of donated care per patient. In addition, physicians were given the

* Melissa Sawyer is Assistant Program Director of the Arkansas Health Care Access Foundation.

Figure 2: Ancillary Services Donated by Physicians



opportunity to comment on the effectiveness of the program.

Sixty-two patients were polled as part of this study (representing 24% of surveys mailed). Questions were asked about how they became aware of the Health Care Access Program. In addition to demographic information, they were given the opportunity to let us know if they would have received health care without this program and if they would use it again.

Physician Results

Physicians reported a total of 354 visits that were donated to patients during the last year. Though doctors are required to donate only the initial visit as part of the program, the majority of them (52%) donated follow-up visits. In addition, 50% of the doctors polled donated sample medications; 38% donated lab tests; and 33% donated x-rays, EKGs and other diagnostic tests (See Figure 2). A small percent of physicians reported donating surgeries such as breast biopsies and orthopedic procedures. Overall, physicians in this sampling donated over \$19,000 in treatment.

The overwhelming majority of physicians (76%) rated the program as effective. Those who rated the program as ineffective listed their concerns. Several of those who rated the program ineffective expressed concern over the great distances some patients have to travel to reach a volunteer specialist. For instance, a gynecologist in Fayetteville commented that some patients have come to him from as far away as Clarksville and Mountain Home. Because the Health Care Access

Program relies on professionals to donate care, this situation is not terribly unusual in given regional areas when specialty care is needed.

In addition, some physicians had concerns about patient eligibility. When this is the case, the doctors reported they had called us to report the situation. In every instance, AHCAF staff will question that patient about resources. If ineligible, patients cannot use the program.

Demographics on the physicians who volunteer with AHCAF were taken from their database of providers. Primary care physicians (family practice, pediatrics and internal medicine doctors) represented the largest group of doctors at 51%. Specialty care represented the remaining 49% of doctors listed with AHCAF as volunteers. Since July 1, 1998, when AHCAF's fiscal year began, 40% of the referrals were to physicians. The second largest percentage of referrals was to pharmacies (39%).

Patient Results

Patients were asked if they would have received help for their illness without the Health Care Access Program. Eighty-four percent of them said they would not have received any help otherwise. In addition, 92% of patients said they would call AHCAF again if they needed help. The majority of patients (55%) said they heard about the program from their local Department of Human Services office. The remaining answers varied, with patients finding out about the program from doctors, the Arkansas Department of Health, friends and advertisements. Seventy-nine percent of the patients polled reported that AHCAF physicians donated one to two more visits beyond the initial visit. Twenty percent received three to four donated visits, and 1% received 5 or more extra visits by donation. In addition, patients reported they received donated care by other volunteer medical professionals, including pathologists, radiologists and physical therapists.

The majority of patients were Caucasian (56%) and female (76%). African Americans accounted for 37% of the patients polled, and 24% of patients were male (See Figure 3). Seven percent of the patients listed were Asian, American Indian or Hispanic. Family units varied with 37% being single-person households and 58%

Figure 3: Patient Demographics

Gender:	<u>Female</u>	<u>Male</u>			
	76%	24%			
Race:	<u>White</u>	<u>Black</u>	<u>Other</u>		
	56%	37%	7%		
Age:	<u>18-29</u>	<u>30-39</u>	<u>40-49</u>	<u>50-59</u>	<u>60+</u>
	10%	21%	26%	23%	20%
Number in					
Household:	<u>1</u>	<u>2-4</u>	<u>5+</u>		
	37%	58%	5%		

being households of 2-4 people. Those with households of five or more represented 5% of those polled. The majority of patients ranged in age from 40-49 years old (26%). The second largest age group was 50-59 years (23%). Patients aged 30-39 accounted for 21%, followed by those over 60 at 20%. The smallest age group was 18-29 years old with 10%.

Conclusions

There is a great need for medical care for low-income residents in our state. While many donated health care initiatives exist, no single organization has been able to pool the resources that AHCAF has available on a statewide level. It is clear from the findings of this study that both physicians and patients are satisfied with the efforts of the Health Care Access Program. Physicians may donate their care without ever having to leave their office, minimizing the extra time they may be donating to other clinics designed to help low-income citizens. With the continued support of medical professionals who volunteer their services, many of the needs of this population can be met. Further, their needs can be met in a cost-effective and time-efficient manner.

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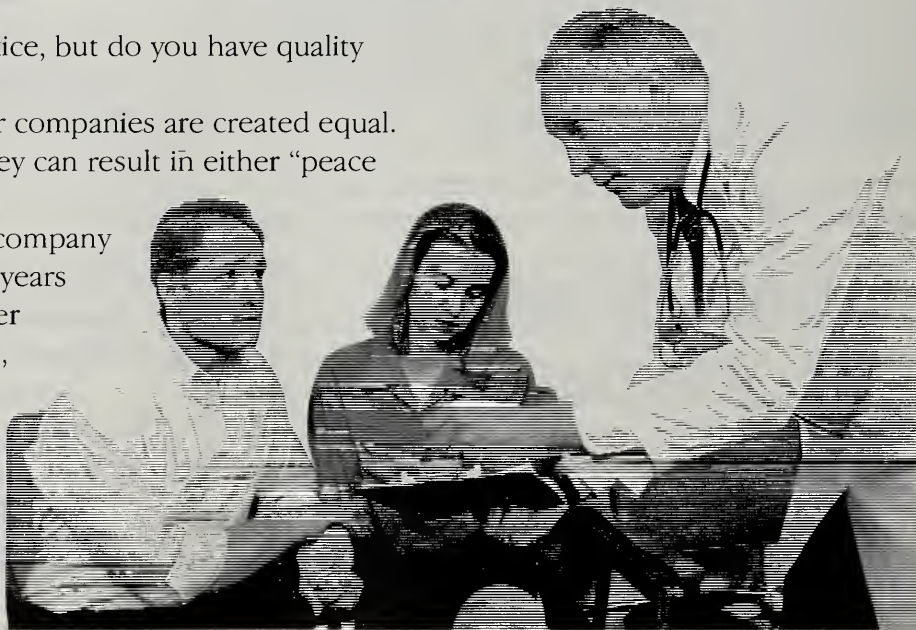
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Health Care Professionals Speak Out About Donated Medical Services

Several health care professionals and volunteers were asked to comment on their programs or experiences and thoughts on health care access and volunteering free medical care and services to Arkansas' indigent and underserved citizens. Here is what they had to say...

"As a pediatrician, I am pleased to live in Arkansas and very proud of our states' medical care programs for indigent and uninsured children. We have one of the most comprehensive health care programs in the nation for our medical recipients. With the ARKids First Program we have extended coverage to the children of working parents who have low paying jobs for which health insurance is not provided as a benefit. Many of these children do not enter the system until they are forced to seek medical attention for an ailment. Through the access program they can be evaluated and their problem diagnosed and then helped to apply for any programs for which they might qualify. During this visit, their immunizations, growth and development and health status can be evaluated and their needs determined. They can be referred to the health department for vaccines, perhaps WIC or nutritional help and other services arranged through the school system, CMS, etc.

I have practiced medicine in Arkansas for over 25 years. In the early days, it was easy to see a child for "free" or reduced rate if I knew his family could not afford the visit. I could treat with samples if I had them or put "pp" on the prescription. The locally owned pharmacies would understand the notation and often supply medicines at cost. With government regulations and managed care, this sort of free care is no longer possible. The Arkansas Health Care Access Foundation program at least allows us a way to see a patient "free gratis" legally."

Sue Chambers, M.D.

Pediatrician

Little Rock

.....

"I have been involved in free medical clinics for over 10 years. Initially, I did recruiting for physicians and for the last four years have been actively involved in patient care. I currently serve about three times a month at the Good Samaritan Clinic that is sponsored by the St. Paul United Methodist Church in Fort Smith and the Fayetteville Free Clinic which is community sponsored.

Physicians from many specialties staff both clinics. I have enjoyed working with the staff at each clinic,

and it has been satisfying to be able to continue to help people.

Some of the arguments I hear for not serving are: fear of malpractice; not wanting to be obligated for certain time slots; if retired, being unsure of clinical skills; and leaving patients without coverage when the clinic is not open.

In Arkansas, there is a statute that would make it extremely difficult for a patient who is seen free to sue a physician. Also, one of the major malpractice insurance companies offers an excellent policy (for only \$100 per year premium) to retired physicians who do free work, if you had insurance with them previously.

Free medical clinics will offer an extremely flexible schedule and work within your schedule. Since most free clinics do not offer care at times other than scheduled hours the patient is left uncovered for emergency care or evaluation at other times. This is a real problem but should not be a reason not to serve. By serving, you are giving people care that they would not get otherwise, and this one disadvantage should not be a significant reason not to help.

At both clinics the patients are screened for insurance or Medicaid. All of the people fall through the cracks and cannot afford even the most basic medical care. Most of the problems patients who come to clinics have can be evaluated and treated with a good history and physical examination; the basic skills that come back quickly, even if not used for some time. I am a retired pediatrician and had not evaluated adults for many years, but after the first clinic I felt comfortable helping them with most of their problems.

Both communities where I serve have a core of specialists who will see referrals from the free clinics, so you are not out there alone when you feel unsure. Also, both clinics have a small pharmacy that is staffed by volunteer pharmacists.

The patients are very appreciative for your help. I have received a sense of satisfaction from serving, and I am pleased to be able to assist those less fortunate. This might be an experience that you would want to try."

Charles H. Floyd, M.D.

Retired Physician

Mountainburg

.....

"As a hospital Social Worker, I am faced daily with people who are impoverished. Sometimes this is due to their own mismanagement or maybe an inability to manage, but many times it is at least partially due to the cost of medical care and the cost of their medications.

The reality is that there are not enough resources to go around and never will be. It takes organizations like the Arkansas Health Care Access Foundation, physicians, community organizations, churches and individuals to help those who are truly in need.

We all know that there are many who don't do what they can to help themselves and expect others to do it for them. It is these people who have tainted our willingness to reach out and help those in need. BUT, there are MANY who are doing all they can and who greatly appreciate every bit of help that they are given.

I am grateful to work for a hospital who is willing to look at the individual, their circumstances and needs and help as we can. Personally, I am not looking to save the world, but do hope that I don't become so callused and cynical as to turn away those placed in my path who are truly in need."

Tina Hallenbeck, L.S.W.

*Social Worker, North Arkansas Regional Medical Center
Harrison*

"The Charitable Christian Medical Clinic (CCMC) started in 1997 as a ministry of a local church but now combines resources of the medical, religious, government and business communities in Hot Springs. CCMC utilizes the volunteer services of over 100 doctors, 10 pharmacists and scores of nurses, med techs and lay volunteers to provide a doctor visit; lab tests and selected x-rays (done free of charge by St. Joseph Health Center and National Park Medical Center); and medications to the uninsured. Referrals to specialists, therapists, dietitians, social workers and spiritual counselors may be arranged. The clinic meets twice a month at the Garland County Health Department. A dental program was just implemented, and a Drug Assistance Program helps indigent patients who may qualify for help from pharmaceutical companies.

Many physicians feel that health care is available to the people who really need it, even if they can't afford it. However, physicians who work at CCMC now realize that there are many people who simply don't seek health care because they can't afford the costs. Untreated diabetics, hypertensives, asthmatics and others have found help at CCMC because of the volunteerism in this town of caring people. In Hot Springs, CCMC is known as the *Gift of Health*."

John Wayne Smith, M.D.

*Medical Director, Charitable Christian Medical Clinic
Hot Springs*

"Since its inception in 1989, the Arkansas Health Care Access Foundation (AHCAF) has grown and prospered. Through the support and cooperation of Arkansas hospitals, dentists, physicians, county health departments, pharmacies and home health agencies, over 54,000 needy Arkansans have been certified for

care in which no compensation will be received. Arkansas hospitals have offered care and services to those patients, which is included in the \$125 million in charity care the hospitals provide each year. Another \$396 million in services that patients cannot afford to pay is simply written off annually. The Arkansas Hospital Association is proud to support the activities of the AHCAF and its mission to provide health care to uninsured Arkansans."

Beth Ingram

*Vice President, Arkansas Hospital Association
Little Rock*

"God has called us to reach out and help those who cannot help themselves. In a land of plenty, many are hungry, without shelter, without proper clothing and, as difficult as it may seem, without decent medical care. River City's medical clinic was set up to provide medical services to those who have no insurance and who cannot afford to pay for health care. We do our best, but the need is overwhelming. We see 20 patients per week and get calls for another 15-20 more that we have to turn down due to limited time from volunteers and limited financial resources in obtaining prescription medications. Any help that anyone could give in either area would be deeply appreciated by those we serve."

Benny Bittle

*Minister at River City Church and Medical Clinic
North Little Rock*

"The Northwest Arkansas Free Health Center has been in operation since 1987. It operates under a fifteen-member board and has four paid administrative personnel. It operates out of a county-owned building and pays no rent. Funding is through United Way, fund-raising events and donations from civic clubs, church groups and individuals. Medications for the pharmacy are donated by physicians (mostly samples) and by Washington Regional Medical Center. Some medications are purchased from local pharmacies.

The center's mission statement is as follows: The Northwest Arkansas Free Health and Dental Center serves as a change agent in peoples' lives to move them from emotional, physical and social dependence to independence. It also provides an opportunity for people to serve others.

This free clinic is open on Wednesday 1:00 p.m. to 3:00 p.m. and on Thursdays 4:30 p.m. to 7:30 p.m. It is staffed by volunteer clerks, nurses, pharmacists and physicians. Some of the physicians are still in active practice and some have retired. The local pediatric group provides frequent and valuable staffing for the evening clinic. I am one of the retired physicians and have worked both day and evening clinics depending on the need that month.

The clinic provides a valuable service for a group of people who "fall between the cracks" in the medical care system. Many of our patients are "working poor" who are unable to afford health insurance and do not qualify for any type public assistance such as Medicaid. Some are on Medicare but cannot afford to buy all the medicines they are suppose to take. They attend the free clinic primarily for prescription refills.

The free clinic's pharmacy is an essential element. All medications are dispensed free of charge. It would be of no value to a patient to hand them one or more prescriptions if they have no money to get them filled. Most of our patients are in that situation. And, as mentioned above, many of them come in mainly for refills of prescriptions they must take all the time.

As a retired physician, I find it personally satisfying to be able to use my practice experience in this way -- helping people whose medical needs would otherwise go unmet until their situation worsens and they land in the Emergency Room. The main frustration in this work is being unable to help individuals with very complicated medical problems that require laboratory testing or monitoring which we are not able to provide. Many such patients need to be under the care of a specialist, but cannot afford this type of care.

My personal opinion is that adequate health care should be available to all our citizens regardless of ability of pay. The federal government has not been able to come up with such a plan, so maybe we ought to try to solve this problem at the state level. I would like to see some of our Arkansas politicians come up with such a plan. Solving the problem at this governmental level would surely be cheaper, more efficient and less bureaucratic than a national program. Citizens of the richest nation on Earth should not have to suffer and die for lack of adequate health care. In the meantime, the Northwest Arkansas Free Health Center is lighting just one candle at a time -- a better approach than cursing the darkness."

Wade W. Burnside, M.D.

Retired Physician

Fayetteville

.....

"Over the last several years, our profession - as it is interwoven strongly within the ranks of health care delivery - has been in a great deal of turmoil in terms of the economical, political and social environment. Some of these factions have become a barrier rather than an avenue to health care access; and there are many Arkansans who have no access to medical care. The Arkansas Health Care Access Foundation (AHCAF), a program of the Arkansas Medical Society, has provided health care access to over 54,000 enrollees since its inception in September of 1989.

As immediate past president of the AHCAF board of directors, I have seen the impact this program has had on fellow Arkansans who had no other alterna-

tives. The program presently has over 1,000 physicians, 356 pharmacies, over 100 public health units, 40 home health agencies, over 90 hospitals, 140-plus dentists, 14 podiatrists and over 80 Department of Human Services offices involved in the delivery of this health care. Nearly all counties in Arkansas are represented by volunteer health care providers participating in this program.

Arkansas is considered a rural state, and the AHCAF is of particular interest to rural Arkansans who are affected - in terms of access to health care - in a greater proportion than the remainder of the state. However, access to health care is an issue for urban areas in Arkansas as well. Health care delivery in both rural and urban areas is made possible by having a statewide program in operation. The AHCAF is one of four statewide programs in the United States and has become a model for other states.

I must keenly remind you that the services provided through the AHCAF are strictly voluntary on the basis of the physicians, dentists, pharmacists, hospitals, podiatrists and home health agencies as well as the efforts of the Department of Human Services to qualify patients for this program. Qualifications are based on three criteria; (1) they must be an Arkansas resident, (2) their family income must fall below 100% of the federal poverty level, and (3) they must have no health insurance. Once they are determined to be eligible for the program, they must call the AHCAF for referral to the appropriate physician. Pfizer, Johnson & Johnson and SmithKline Beecham pharmaceutical companies have become involved with our program, and patients who qualify for services can receive these manufacturers medicines free of charge when referred to volunteer pharmacies. Eli Lilly plans to make their products available sometime in the following year.

We realize that such a program will not solve all the medical problems of access and indigent care in Arkansas, but we have made great strides. Other programs have consisted of establishing free clinics and having nurses and physicians staff these clinics but have been shown to be rather expensive and time consuming. A simple method, as used by the AHCAF, is to have the patient see a volunteer physician in that physician's own office.

I strongly encourage all physicians, dentists, pharmacists, hospitals, podiatrists and other agencies to become involved in this worthwhile project, which has been very successful since 1989. As we continue toward the millenium, we hope that newer approaches and strides will be reached."

Simmie Armstrong, Jr., M.D.

1997-1998 AHCAF President

Pine Bluff

.....

About one-half of the American people never go to the dentist. This percentage has remained fairly constant during my 21 years of dental practice. Some

never go because of fear, but most never go because they just cannot afford even the most basic dental treatment.

Dentistry has been very good to me. I have a very busy practice, composed of mostly middle to upper-middle class patients. Many of these have dental insurance plans and inability to pay for dental treatment is never a problem. The large percentage of people that absolutely cannot afford to pay for dental treatment prompted me to volunteer my time and effort to two very worthwhile programs. The Arkansas Health Care Access Foundation provides basic dental treatment and pain relief to the economically disadvantaged and Donated Dental Services provides more comprehensive dental care to the disabled and/or elderly, who have severe dental needs. My volunteer association with both programs has been very positive and has provided me with a great deal of personal pride and satisfaction.

The patients that come to my office through these programs are always very courteous, appreciative of any treatment provided and are all goodwill ambassadors for my practice.

Proper and timely dental treatment of the other fifty percent should be a priority for all concerned dentists and participation in programs such as the Arkansas Health Care Access Foundation and Donated Dental Services will help accomplish this goal. The time and effort involved is nominal but the rewards are great."

Leif Lorenz, D.D.S.

Dentist

Little Rock

.....

"Garland County's Charitable Christian Medical Clinic has been the focus of attention by many health care providers in Arkansas. Over the past two years, we have seen community involvement for this project



soar to great heights. We have seen churches of different faiths working together to provide for those less fortunate than ourselves. Our two community hospitals are actively participating by providing lab work and necessary x-rays at reduced rates (many times, free). We are seeing physicians who have been divided by HMO barriers working side-by-side. Independent pharmacists and chain-store pharmacists are cooperating in the clinic pharmacy.

Yes, we are giving the uninsured residents of Garland County more health care than they were previously eligible to receive or were able to afford; but, more importantly, we are again realizing how important it is that we strive to work together to solve common problems. Sharing the burden of helping those in need has been an experience that is unequalled in value to anything we have previously experienced in this area. Because the patients we see are not eligible for any state aid, we have tried to develop other methods of providing for continued availability of the medications that they are prescribed. Area physicians are sharing their samples with us. Patients who have unopened stock packages of their medications that have been discontinued by the physician are anxious to donate these to the clinic. Of greater value in the long run are those programs established by the manufacturers for this purpose. For example, the Arkansas Health Care Access Foundation has been extremely helpful, going to great lengths to insure prompt approval and delivery of needed provisions. Factory representatives who come to our pharmacy have been enlisted to assure that their respective companies are involved in these efforts. In short, the clinic cannot and will not be able to operate without the continued support of all the entities and personnel previously mentioned."

Mark Meeker, P.D.



Pharmacist

Hot Springs



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volunteers throughout Arkansas.*

*Special recognition and appreciation to all
contributors of this special issue of The Journal of
the Arkansas Medical Society.*



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If you would be interested in volunteering, please call the Foundation at 1-800-950-8233.

Arkansas Health Care Access Foundation, Inc.

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Patients Speak Out About Donated Medical Services

The following are excerpts taken from thank you notes written to the Arkansas Health Care Access Foundation and its volunteers.

Dear Doctor,

My sincere thanks to you and your staff for seeing me in your office and subsequent outpatient surgery under the Arkansas Health Care Access Foundation Program. If it was not for such a program, I and others like myself would have no options for temporary health care services. It is physicians like yourself and other health care professionals who go beyond the call of duty that give our system of health care so much hope for the future.

Again, I thank you.

AHCAF Patient

.....

To Whom it may concern,

I am writing this to say thank you so very much for all the medical treatment and medicine you have provided for my husband in our time of need. If it had not been for your foundation and the most very helpful and polite staff you have working there, my family would have suffered a great deal. But I thank God for folks like you. It shows me that there is still compassionate people in our society today, willing to help their fellow man. My husband got the medical treatment he had been needing for so long. He suffered a great deal for so long because we had no medical insurance. We both thank you folks from the bottom of our hearts. I hope someday I can repay the kindness you all have shown us. My husband still has a long way to go in his recovery. But mentally he's adjusting better. But I felt like I had to write and show a small part of the huge gratitude my family has for you ladies and the foundation you represent. Thank you, and God bless you all.

AHCAF Patient

.....

To Whom It May Concern,

Just a note to say thank you for your help. We appreciate it very much. I also would like to say that the doctor you sent me to is one of the nicest persons I have had the privilege of meeting. He has seen me three times and made me feel important each time I have seen him.

Thank you again.

AHCAF Patient

This is a long overdue "Thank you." I have tried several times to write a thank you note – but found it very difficult. I think the problem is that I cannot find an adequate way to express how much I genuinely appreciate all the help I've received through your efforts. AHCAF has been a real blessing to me. I am so glad that your program is available. Thank you for all you've done for me and for others.

AHCAF Patient

.....

To Whom It May Concern,

Just a note of "thankfulness" on my behalf for you just being available for assistance to myself and others. I am a single lady age 51 that is among many others with no insurance coverage, and my salary doesn't or job doesn't compensate benefits. Just knowing I am signed up and meet requirements by your foundation is like having a "Band Aid" in my medicine chest. I have never had to use your services and would only respectfully do so – but it is comforting to know you are there.

God Bless,

AHCAF Enrollee

.....

Dear AHCAF,

I would like to thank you for helping me. Having a health problem that seems an impossible situation can be very frightening. Your taking the time to help solve the situation really means a lot to me and my friends. I think everything is going to be okay, now. Please express my thanks to the whole staff.

Thank you.

Thank you.

AHCAF Patient

.....

Due to your generous assistance, I was able to see an eye doctor and no longer fear the loss of my vision.

I appreciate all of you...Thank you all for being there.

Sincerely,

AHCAF Patient

Trauma Deaths in a Rural Area

Jeanine Trevillyan, M.D.*

Judy Abbott, M.D.**

Mark Dixon, M.D.***

Ron Southall****

Abstract

This study was undertaken in order to clarify the causes of death amongst rural trauma victims in Union County, Arkansas. Over a five-year time interval, seventy-two percent (n=60) of the trauma deaths occurred at the geographical site of injury before the arrival of any emergency medical services. Thus, prolonged time to discovery of trauma victims accounts for the most significant factor leading to trauma deaths in Union County. Education regarding injury prevention must continue to be emphasized to the public.

Background

Nearly twenty years has elapsed since the mismanagement of a rural trauma provided the impetus for the development and subsequent implementation of Advanced Trauma Life Support (ATLS). Since that time, ATLS protocol has become the universal standard for the initial care of the trauma patient. Concomitantly, specialized trauma centers have evolved that are decidedly urban in distribution.

Regionalization of trauma care is an unassailable concept. In communities where this policy has been implemented, overall patient survivability and outcome has been enhanced.¹ Implicit in its success is the seamless integration of rapid patient retrieval with definitive trauma care as provided in a designated trauma center. Clearly, the most critical factor that impacts upon a patient's ability to survive is the initial interval of time that ensues between the moment of injury and the initiation of definitive care.

The organizational structure of a regional trauma center is dependent upon high population densities, short transport times and adequate funding. In contrast, the management of rural trauma is often chal-

lenged by prolonged discovery and transport times, limited resources and sparse demographics that cannot justify large capital outlays for the full complement of specialists and equipment. Furthermore, many rural areas are geographically situated outside the scope of a regional trauma center. Principles derived from the urban experience do not always lend themselves to ready applications in the rural setting.²

Injury itself is inevitable. In light of this, various studies have concluded that among injuries sustained in a rural environment, the probability of survival is less.³ Inherent in this disparity is the constraint that most rural injuries cannot be logistically addressed with the celerity that has come to be expected in the urban setting. For this reason alone, rural trauma mortality will exceed that of its urban counterpart. In the present study, we evaluated the causes of death in rural trauma patients with the objective of identifying factors that, if modified, might improve survival.

Patients and Methods

The Medical Center of South Arkansas in El Dorado (MCSA) is the largest hospital in rural south central Arkansas. It is a 123-bed facility in a community of 23,000 people and it serves a county with a population of 47,000. The population density of Union County is approximately 30 people per square mile. The adjacent counties are less populous.

Two EMS groups are located within the county, as well as one volunteer service. The average run time within the county is 23 minutes. Aeromedical support does not originate locally and it must be requested from cities that are nearly 120 miles away. Airtime in one direction is about 60 minutes. Ground transport in one direction during optimal road conditions is at least 100 minutes. As a rule, nearly three hours elapse from the time of discovery until a patient can be delivered to a trauma referral center.

The emergency department at MCSA is staffed with family practice trained physicians and residents who are required to be current in Advanced Cardiac

* Jeanine Trevillyan, M.D., is an Emergency Physician at Magnolia Hospital in Magnolia and Ashley County Medical Center in Crossett.

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*** Mark Dixon, M.D., is Program Director of the Area Health Education Center in El Dorado.

**** Ron Southall is Coroner of Union County.

Life Support (ACLS), Advanced Trauma Life Support (ATLS) and Pediatric Advanced Life Support (PALS). Surgical staff support for trauma includes three general surgeons, three orthopedic surgeons and two ENTs.

There is no trauma registry. Major traumatic injuries in this study were identified from the emergency department log over a five-year time span beginning June 1, 1992, and ending May 31, 1997. Major injuries were earmarked by patient dispositions to the operating room, intensive care unit or for transport to a distant trauma center. Burns were excluded for purposes of this study. Also excluded, were intensive care unit admissions of patients sustaining relatively minor trauma but whose underlying medical problems were the prevailing concern. Factors causing death in trauma patients were cross-referenced with coroner reports as well as medical examiner autopsy findings where applicable.

Results

Over a five-year study interval, 215 victims of major trauma were seen at the Medical Center of South Arkansas. One hundred seven patients were transferred to Level I or Level II trauma centers and the outcomes of those patients are unknown. Thirty-four patients underwent surgery locally and twenty-six were discharged home. A total of 83 patients died locally as a result of injuries (Table 1).

Seventy-two percent (n=60) of the trauma deaths occurred at the geographical site of injury before the arrival of any emergency medical services (Table 2). Thirty on-site deaths were occasioned by motor vehicle crashes. Of interest, nineteen of these deaths happened to solitary occupants of motor vehicles who veered off the road. Gunshot wounds claimed nineteen lives with eleven deaths being self-inflicted. The remaining deaths resulted from an assortment of causes.

Eight patients had signs of life on the scene but expired upon arrival at the hospital (Table 3). All the patients had been intubated properly. Four patients sustained uniformly fatal injuries. Four patients had undergone thoracic trauma. The death of one patient may have been forestalled by a needle decompression of the chest.

Eight patients were unsuccessfully resuscitated in the emergency department (Table 4). Five of these patients died of thoracic injuries. Each patient was correctly intubated. One resuscitation may have been more successful if a chest tube had been placed. The actual cause of death in this instance was bleeding from the left upper lobe of the lung.

Thirty-four patients were operated on at the community hospital (Table 5). Blunt injury was the causative factor in fourteen cases and penetrating trauma preceded twenty cases. Three patients died in the operating room, two of which were undergoing thoracotomies.

Table 1: Distribution of trauma deaths (n=83)

Dead on scene	60
Dead on arrival	8
Emergency department	8
Operating room	3
Post-operative	2
Other	2

Table 2: Trauma deaths at the geographical site of injury (n=60)

Profile

45 males and 15 females
average age 35 (range 15 to 83)

Mechanism of injury

GSW to chest	8
GSW to head/neck	11
MVC	30
ATV	1
Pedestrian	2
Fall	2
Falling object	2
Crush	2
Boating	1
Hanging	1

Cause of death

Head	(n=20)	
	Basilar skull fracture	6
	GSW head	10
	Massive head injury	3
	Subarachnoid hemorrhage	1
Neck	(n=5)	
	Cervical spine fractures	5
Chest	(n=18)	
	Compression asphyxia	3
	Chest contusion	4
	GSW to aorta	2
	Herniation of abdominal contents into chest	1
	Ruptured atria	1
	GSW to chest	6
	Myocardial infarct before impact	1
Pelvis	(n=1)	
	Pelvic fracture with evisceration	1
Combined injuries	(n=16)	
	Massive head and chest	9
	Crush of head, chest and abdomen	1
	Basilar skull and cervical spine fractures	3
	Multiple chest and internal injuries	3

Table 3: Profile of patients dead on arrival (n=8)

Profile

4 males and 4 females
Average age 38 years (range 18 to 79)

Injuries

M	MVC	head
F	GSW head	head
M	MVC	head
F	MVC	cervical spine fractures
F	MVC	compression asphyxia due to excessive body weight
M	GSW to chest	hemopneumothorax per post-mortem CXR
M	GSW to neck/chest	700ml hemothorax per post-mortem chest tube
F	MVC	chest and internal injuries

One patient had a massive hemothorax and the other patient, noted to have a wide mediastinum, died during induction. The third patient has an unsuccessful celiotomy for Grade V liver injuries.

Two post-operative deaths resulted. One patient developed a tension pneumothorax intraoperatively. While this was promptly recognized and addressed, it precipitated a fatal myocardial infarction two hours later. One patient successfully underwent a repair of his left ventricle for a stab wound. He died three days later from a pulmonary embolus.

Two deaths occurred to patients being observed in the intensive care unit. One patient was inresponsive secondary to a severe closed head injury but his wife refused transport to a trauma center. He expired within a few hours. The other patient was admitted for the management of a flail chest and died six days later from a pulmonary embolus.

Three patients were referred out in the immediate post-operative time frame. One pregnant patient had been involved in a vehicular crash and sustained a pelvic fracture with a placental abruption. A hysterotomy was performed locally. The second patient had been shot in the sacrum and had a colostomy done locally. He was transferred for the management of his pelvic fracture and a substantial retroperitoneal hematoma. The third patient sustained a gunshot wound to the abdomen and was referred elsewhere for lumbar root damage incurred by the bullet. One patient had been managed on a ventilator until he developed extensive subcutaneous emphysema. He was referred for repair of a suspected tracheal or bronchial tear.

Thoracic trauma was the causative factor leading to the death of eighteen trauma victims at the geographical site of injury. It was a substantial contributing factor in thirteen other on-site fatalities. Thoracic trauma accounted for one half of the deaths in patients brought to the hospital by the EMS and was

attributed as the cause in two-thirds of the community hospital deaths. No patients lived long enough to be referred to the trauma center with thoracic trauma as the primary indication for transport.

Discussion

In 1979, Houtchens reported on trauma in the rural mountain west and stated that "almost half of all fatalities occur after arrival at a community hospital."⁴ Since that time, the causes of rural trauma deaths appear to be changing. Implementation of ATLS training and standardized EMS protocols has appreciably diminished mortality from remediable causes. In our series, 72% of the trauma deaths in this area occurred at the geographical site of injury. Hence, the preeminent role of prevention cannot be overemphasized.⁵ In rural environments, the prolonged time to discovery may toll the "Golden Hour."

Over the five-year study interval, 215 major trauma cases were first seen at our rural community hospital. Only fifteen patients, or eighteen percent of the total, died after arrival. Undoubtedly, this decreased trauma case fatality percentage is best attributed to a low threshold for transporting patients to trauma referral centers. While many rural surgeons have performed admirably, it is clear that certain types of injuries are best handled at specialized centers.⁶ In our study, 49% (n=107) of those patients sustaining major injuries were referred to seven different trauma centers. The diversity in choices for definitive trauma care reflects a complex admixture of insurance reimbursements and physician or family preferences.

In distinct contrast to most head and spinal cord injuries that survive the initial insult, vascular derangements of the chest and abdomen do not share the same window of opportunity. An unattended arterial bleed can precipitate the death of a patient within thirty minutes. Vigorous resuscitation in the face of ongoing bleeding does not address the underlying problem and may actually destabilize a fragile situation.⁷ Simply stated, there may not be adequate time to allow for transport. Under such conditions the best opportunity for survival often mandates aggressive local intervention in order to achieve stabilization before transport.^{8,9}

Surgeons in community hospitals can successfully manage many abdominal injuries. However, it is important to remember that the trauma referral center still plays an important role as the provider of tertiary support in the event that the need for specialized ser-

vices develops.⁶ On the other hand, thoracic trauma occasioned in a rural setting most often eludes needed specialist input. Very few of these patients survive long enough to be transported to a trauma referral center.

Chest injuries directly account for at least 25% of all trauma deaths on an annual basis and are a substantial contributor to another 25% of

deaths.¹⁰ Our study has demonstrated that 66% of the community hospital deaths were precipitated by thoracic trauma. It would then appear that the management of this type of injury would best be served at a specialized facility.

In summary, effective rural trauma management strikes a delicate balance in a spectrum of components ranging from prevention, transport, resuscitation and stabilization to definitive surgical intervention. While it is important not to overlook easily remediable factors that place a patient in peril, the great majority of rural trauma deaths occur before medical assistance can be provided. Education regarding injury prevention must continue to be emphasized to the public in order to decrease the number of trauma deaths.

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Table 4: Trauma deaths in the emergency department (n=8)

Profile

6 males and 2 females
Average age 39 years (range 16 to 80)

Injuries

M	MVC	fatal pulmonary contusion
M	Falling tree	bilateral lung contusions
M	Stab to chest	chest tube placed with 500ml return of blood
M	GSW neck/shoulder	1000ml hemothorax at autopsy, no chest tube
M	stab to back	great vessel injury per surgeon present
F	GSW to abdomen	agonal on arrival
F	GSW to head	agonal on arrival
M	shotgun to mouth	agonal on arrival

Table 5: Operative trauma profile at the community hospital (n=34)

Mechanism of injury

MVC	13
GSW	15
Stab wound	5
ATV	1

Procedure

Celiotomy	27
Thoracotomy	5
BKA	1
Arterial repair	1

Disposition

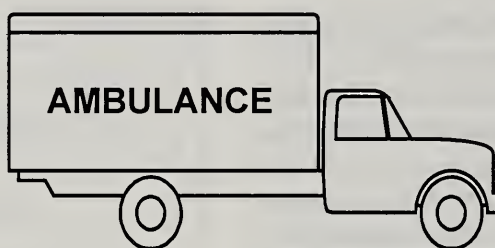
Died in OR	3
Died post-op	3
Transferred	3
Home	25

Table 6: Indications for patient transport to a trauma center (n=107)

Pediatric trauma	23
Closed head injuries	19
Skull fractures	7
GSW to head/neck	10
Spinal cord injuries	21
Facial fractures	5
Pelvic fractures	3
GSW to the axilla	1
Arm in grinder	1
GSW to abdomen	1
Post-operative patients	3
Unknown/illegible	12
Trachea and bronchus tear	1

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Community Health Centers: *Part of the Health Care Safety Net*

Norton Wilson*

Recent federal policy decisions, plus dramatic changes in the health care system, have combined to cause a substantial weakening of America's health care safety net for our most vulnerable citizens. Among those vulnerable are Arkansas farm workers, lumber industry employees, small businesses that cannot afford health insurance premiums, elderly on fixed incomes, single family providers and rural residents. The Community Health Centers (CHCs), with nine centers serving 37 Arkansas communities – mostly rural, are an integral part of the health care safety net. CHCs work within the health care delivery system by providing more options to access, quality care and affordability; the necessary keys to health care for many of our citizens.

For example, Mary Lou ...

Mary Lou, wife, mother of four, 36-years-old, living in rural Arkansas is worried about her health. She has a lump in her breast. Her children have respiratory and dental problems. Her husband works on a farm and earns about \$250 per week. They have an old truck that he drives to work six days each week. She doesn't work because there are no jobs available, and she lives eight miles down a country road away from any kind of transportation. As for health care, she faces four big problems that she must overcome:

How does she find a physician within a reasonable distance who will see her? How does she pay for the numerous visits she and her children will require? How does she find transportation back and forth? Finally, will she have confidence in the quality of care she and her children will receive?

At church one Sunday, a friend told her about Mid-Delta Health System, a primary health care center located in Clarendon where she had received help. The following Monday, using a neighbor's phone, Mary Lou called the center, told them her problem and asked if she and the children could come in. She was met by friendly and caring people. After seeing

the physician, she had confidence in the quality of care and felt welcome. She only had to pay what she could afford based on the family income. The center could even make provisions for transportation for future appointments.

Another example is Jim ...

Big Jim is a man of influence in the community. He's a large landowner who has farmed soybeans, cotton and rice for most of his 48 years. He also raises cattle. Jim is considered wealthy by some standards, and he lives about 30 miles from the nearest hospital.

Jim began having chest pains about 10 o'clock one morning, but ignored them because he was "healthy as a racehorse." He had never had any heart problems. His family had begun going to the Mainline Health System clinic in Portland about two years ago for minor injuries and scrapes. His children had been patients on several occasions. They received vaccinations and pre-school check-ups there. He never really gave the center much thought until that day.

When one of the farm hands ran to Jim's house to inform Jim's wife of the trouble her husband was having, she immediately called Doc Heder who sent the county-owned ambulance. After reaching the scene, the attendant radioed in to the center to inform them of the serious heart problem. He said that Big Jim couldn't make it to the hospital without being stabilized first. Dr. Heder told them to bring Jim to the center where, with the help of a defibrillator, Big Jim was given emergency care. Once stabilized, Big Jim was taken to the hospital. Without the center located in this isolated, little farm community, Big Jim may not have survived.

These stories are repeated hundreds of times each year by Arkansans who have similar problems. CHCs are a significant key to rural health care in Arkansas.

Background

The Community Health Center program is a nationwide system that served ten million patients in 1997. Of those served, 5.3 million were rural Americans.

* Norton Wilson is Executive Director of Community Health Centers of Arkansas.

Names and Locations of the Centers

Boston Mountain Rural Health: *Marshall, Clinton, Fairfield Bay*

CABUN Rural Health: *Hampton, Bearden, Hope, Lewisville, Strong*

Corning Area Healthcare: *Corning*

East Arkansas Family Health: *West Memphis, Lepanto*

Jefferson Comprehensive Care: *Pine Bluff, College Station, Redfield, Altheimer, Rison*

Lee County Cooperative Clinic: *Marianna, Madison, Lakeview*

Mainline Health Systems: *Portland, Dermott, Wilmot, Eudora*

Mid-Delta Health Systems: *Clarendon, DeValls Bluff, Holly Grove*

White River Rural Health: *Augusta, Bald Knob, Swifton, McCrory, Parkin, Des Arc,*

Cotton Plant, Carlisle, Hazen, Kensett

According to Phyllis Kordsmeier, chairperson of the Arkansas Primary Care Association, "The number of uninsured individuals is growing at a rate of about one million per year nationwide. The numbers are also increasing in Arkansas."

CHCs operations began in 1965. The Centers are non-profit corporations, whose Board of Directors are clients who reside within the Centers' operating areas. The Centers are manned by trained physicians, nurses and support staff. Many physicians are faculty members of UAMS. The Centers are usually located in rural areas, which are designated as medically underserved. It is most common to be the only medical, dental or pharmaceutical providers in the counties they serve.

Centers serve all who seek care. The mission of Community Health Centers has been expanded through the years and states that all residents of the area, regardless of one's economic scale, shall receive quality care. The centers welcome full pay, third-party insurance, Medicaid, Medicare and sliding fee scale patients. The Centers will have in excess of 200,000 medical and dental encounters in 1998. The system is the largest rural health provider in Arkansas.

All thirty-seven community health centers have just completed the Joint Commission on Accreditation of Health care Organizations (JCAHO) review and have been certified as accredited. This process ensures and states that the CHCs have met or surpassed all standards set forth by this nationally recognized commission.

Community Involvement

The centers focus on disease prevention and health promotion in addition to the treatment of illness. The Centers provide a wide range of comprehensive medical services including X-rays, pediatrics, perinatal programs, health education, nutrition counseling, family planning, geriatrics, internal medicine, pharmacy, diagnostic laboratories, after-hours services and transportation among others. Some Centers also provide such specialized services as vision, dental care, obstetrics, fluoride application and hygiene instruction.

The demand for expanded primary care services in rural Arkansas continues to be a factor in the growth of CHCs. Three more centers are to begin operation

before the end of the year. The appeal according to Mayor Pat Clyburn of Carlisle is local involvement and control. "Our citizens decide the type services needed. The local board members hire the administrator and meet each month to review center operations. The economic impact of the Centers is also vital to the area," states Mayor Clyburn. "Without local health care, industry dies.

There would be no local drug stores, a loss of tax money, fewer jobs, and therefore people would move. Health care access is the life blood of a growing community and the CHCs are exactly what we want and need."

All CHCs participate in the Arkansas Health Care Access Foundation (AHCAF) sponsored by the Arkansas Medical Society. The program seeks medical, dental and other providers who agree to donate an office visit to an AHCAF referred patient.

Physician Recruitment and Retention

Dr. Nick Paslidis, board certified in internal medicine and trained at Harvard School of Medicine/Brigham and Women's Hospital in Boston, Massachusetts, is a full time physician at the Carlisle clinic. "I know it's strange that a man with my medical background would practice in a small, Arkansas community, but I love Arkansas and working at a quality care center," says Paslidis. "We are building a new, larger clinic, and I'm really excited about the future. I've had a lot of job offers the past few years. I still get them every week, but I love working at a CHC. I practice my type of medicine. I am on the teaching faculty at UAMS with privileges at the Medical Center, Baptist Memorial, St. Vincent's, White County and central hospitals. I'm a happy man."

Filling the Void

Arkansas is truly a rural state with a large medically vulnerable population. A variety of economic and social factors have combined to leave a substantial percentage of the states population medically underinsured and underserved. A deteriorating health care system worsened by a failing rural economy highlights the critical need for quality affordable health services. Hospital closings and physician and nurse shortages are commonplace on the Arkansas health scene. Several hospitals have closed in Arkansas since 1984. More closings are unavoidable.

According to the recent study, *Health Care in Arkansas*, by the Office of Primary Care at the Arkansas Department of Health, 54 of Arkansas' 75 counties are deficient in the number of physicians needed. The Community Health Centers of Arkansas are working hard to provide needed health care services to rural Arkansans. ■

What You, As a Physician, Can do to Help Provide more Access and Options to Medical Care for Indigent and Underserved Arkansans

1. Call the Arkansas Health Care Access Foundation at 1-800-950-8233 to become a volunteer in your area.
2. Check into local church or community organizations and volunteer once or twice a month.
3. Instead of throwing away prescription samples because they have expired, donate them before they expire to a local organization that provides free health care.
4. Become an advocate for health care access in our state and participate in medical legislation.

Volunteer and Donation Opportunities

The following is a list of some of the free clinics and programs throughout the state (this is by no means a complete list of all clinics and programs in the state; check with churches and organizations in your area for others.)

Arkansas Health Care Access Foundation, Inc.

Little Rock, AR, (statewide medical & dental services)
1-800-950-8233
or 501-221-3033

Baptist Community clinic

Little Rock, AR
1-800-262-0054

By HIS Stripes – Health Care Ministries Health Clinic

Little Rock, AR
501-570-0048
Contact: Rev. Antoine Scruggs

Charitable Christian Medical Clinic

Hope, AR
870-777-2191
Contact: Jeannine Wilson, RN

Charitable Christian Medical Clinic

Hot Springs, AR
501-318-1153

Church Health Center

Memphis, TN
901-272-0003

Dixonville Ladies Group Health Education Programs

Dixonville, AR
501-794-0840
Contact: Diana Lewis

Gloryland Baptist Church Health Care Ministries

North Little Rock, AR
Contact: Rev. Cedric Hayes at
501-378-9707 (pager)
or Rita Frazier at 501-791-0988

Good Samaritan Clinic

Ft. Smith, AR
501-785-0964
Contact: Ralph Moore

Greater Grace Baptist Church Health Clinic

Jacksonville, AR
501-982-7393
Contact: Don Bradley

Jonesboro Church Health Center

Jonesboro, AR
870-972-4777
Contact: Delories Phillips

Mississippi County and Mount Zion Baptist Associations Migrant Ministries Health Clinics

Luxora and Monette, AR
501-794-0840
Contact: Diana Lewis

North Pulaski Baptist Caring Center

Jacksonville and North Little Rock, AR
501-834-6060
Contact: Nina Jones

Northwest Arkansas Free Health & Dental Clinic

Fayetteville, AR
501-444-7548

Pines Apartment Ministry

Little Rock, AR
501-562-4570
Contact: Doris Nash

River City Medical Clinic

North Little Rock, AR
501-376-6694

Searcy County Baptist Church Dental & Medical Ministry

Marshall, AR
870-448-3545
Contact: Rena Treat

Union County Interfaith Health Services, Inc.

El Dorado, AR
501-863-7064
Contact: Father Bob Allen

West Memphis First Baptist Church Health Clinic

West Memphis, AR
870-735-5241
Contact: Steve Smith

Westside Free Medical Clinic

Little Rock, AR
501-664-0340
Contact: Karen DiPippa

To
*those physicians who volunteer
 through the Arkansas Health
 Care Access Foundation,
 Thank You!*
*As you can see from a sampling of
 letters we have received, your
 involvement in our program is
 appreciated and in many
 cases life-saving.*

It has been three days since you sent me to the doctor and I have a ways to go to be 100%, but I can breathe and walk across the room now. I had given up hope almost, and I remembered Arkansas Health Care. The doctor gave me two of the medicines I needed and the pharmacy you sent me to filled the antibiotics. Your doctor even "chewed" me out for not coming in two weeks previously. I'm starting to feel good again. God bless you.

I would like to say thank you first of all. Your program made it possible for me to have a mammogram when I had no where else to turn. I did not realize there was such a program. ...it is a much needed program. Thanks again.

Western Wildlife

As Easterners moved West, pioneers found animals as exotic as the landscape... buffalo, prairie dogs, bears, beaver, bighorn sheep, cougars, wolves and rattlesnakes.

The eagle became a national symbol.

I wanted to thank everyone involved with this program. We had no one else to turn to and we were in desperate need of doctors and medications. Your program has helped us through a very difficult time.

Arkansas Health Care Access Foundation

P.O. Box 56248

Little Rock AR

727-15-6248

For more information on how you can help, call AHCAF at (501) 221-3033 or (800) 950-8233



Arkansas Health Care Access Foundation, Inc.

Due to your generous assistance, I was able to see an eye doctor and no longer fear the loss of my vision. Thank you all for being there.

When I needed medical attention, I was blessed with the knowledge of your program. There were kind and helpful people to guide me.

THANK YOU FOR MAKING THE DIFFERENCE!



State Health Watch

Information provided by the Arkansas Department of Health, Division of Epidemiology

Influenza Update

Arkansas - Through the end of October 1998, the Arkansas Department of Health (ADH) has received no reports of influenza activity.

United States - The U.S. World Health Organization (WHO) collaborating laboratories reported testing a total of 2,341 specimens for respiratory viruses through October 31, 1998. Thirteen (1%) were positive for influenza. Influenza A(H3N2) was reported from New York (1), Texas (1), and Washington state (1); influenza A(not subtyped) from Montana (2) and New York (6), and influenza type B from Texas (1) and Florida (1).

Maryland reported regional influenza activity for the week ending October 31, 1998. Ten states (Alaska, Hawaii, Kentucky, New Mexico, North Carolina, Rhode Island, Tennessee, Texas, Vermont and Wyoming) plus the District of Columbia and Puerto Rico reported sporadic activity. Twenty-one states, includ-

ing Arkansas, reported no activity. The remaining 16 states did not report.

Widespread activity is defined as outbreaks of influenza-like illness (ILI) or culture-confirmed influenza in a county or counties having a combined population comprising 50% or more of the state's total population. Regional activity is defined as outbreaks of ILI or culture-confirmed influenza in a county or counties having a combined population of less than 50% of the state's total population. Sporadic activity is defined as sporadically occurring cases of ILI or culture-confirmed influenza, with no outbreaks detected.

For more information on influenza in Arkansas, please call the ADH, Division of Communicable Disease/Immunizations at (501)661-2784 during normal working hours.

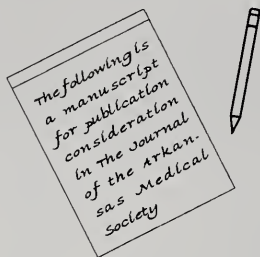
Reported Cases of Selected Diseases in Arkansas Profile for September 1998

The three-month delay in the disease profile for a given month is designed to minimize any changes that may occur due to the effects of late reporting. The numbers in the table reflect the actual disease onset date, if known, rather than the date the disease was reported.

For a listing of reportable diseases in Arkansas, call the Arkansas Department of Health, Division of Epidemiology, at (501) 661-2893.

Disease Name	Total Reported Cases YTD 1998	Total Reported Cases YTD 1997	Total Reported Cases YTD 1996	Total Reported Cases 1997	Total Reported Cases 1996
Campylobacteriosis	139	136	197	175	241
Giardiasis	123	177	125	220	182
Salmonellosis	454	342	366	445	455
Shigellosis	165	186	107	273	176
Hepatitis A	85	187	364	223	500
Hepatitis B	85	73	74	106	93
Hepatitis C	2	4	7	5	7
Meningococcal Infections	26	30	30	38	35
Viral Meningitis	55	21	29	26	38
Ehrlichiosis	12	22	7	22	7
Lyme Disease	6	25	25	27	27
Rocky Mtn Spotted Fever	21	32	20	31	22
Tularemia	20	24	21	24	24
Measles	0	0	0	0	0
Mumps	11	1	1	3	1
Gonorrhea	3044	3760	3841	4388	5050
Syphilis	221	326	599	394	706
Pertussis	67	45	12	60	14
Tuberculosis	106	143	142	200	225

Topics in Search of Authors



You can influence your peers - and give something back to your profession - if you plan to write an article for *The Journal of the Arkansas Medical Society*.

The Journal needs your thoughts and ideas. So why not consider putting your expertise and experience on paper? Here are some topics in search of an author:

- Practice Management for today's physicians
- Coping with difficult patients
- Women's health issues
- Teens and drug use
- Medicare/Medicaid issues
- Medical ethics and health care
- New treatments and technology
- Access to care for the indigent

For information about submitting an article to *The Journal of the Arkansas Medical Society*, see *Information for Authors* on the last page of this issue or call Tina Wade at 501-224-8967 or 1-800-542-1058.

The Arkansas Medical Society

*dedicated to preserving
the high standards of medicine*

The Arkansas Medical Society is a statewide organization that represents all physicians, regardless of specialty, location or type of practice.

The result is a statewide network united for the common good of the medical profession.

The management and staff of the Arkansas Medical Society provide members with the best information and services available.

If you have any questions
or would like to find out more about
the Arkansas Medical Society,
call: 501-224-8967

or write to:

AMS

PO Box 55088

Little Rock, AR 72215-5088

or visit our Website at:

<http://www.arkmed.org>

Arkansas Medical Society Publications

The AMS Membership Directory

A quick and easy guide to AMS physician members, the directory provides addresses, phone and fax numbers, specialties and E-mail addresses. Plus other health related information. The directories are printed each year in late July.

The directories are \$50 each. With a purchase of 2 to 10, \$45 each; 11 or more, \$35 each. (Note: All AMS members receive one free directory through the mail immediately after publication in August of each year.)

The AMS's Physician's Legal Guide

A compilation of state and federal laws affecting the practice of medicine in Arkansas, this guide is 170 pages on topics such as medical records, patient abandonment, medical board regulations, Antitrust Law, Workers' Compensation, & much more. The List Price is \$100.00. **AMS Member Price is \$70.00.**

The Journal of the Arkansas Medical Society

The Journal of the Arkansas Medical Society is published monthly. Every AMS member receives *The Journal* as part of their membership. Subscriptions are available for \$30.00 per year for domestic or \$40.00 for foreign.

Ordering Information:

Send a check or money order made payable to AMS in the amount of your purchase to: AMS, P.O. Box 55088, Little Rock, AR 72215-5088. Be sure to indicate which publication you are ordering and include the name and address of who and where to mail your order. Visa/MasterCard is accepted for payment of the membership directory and the legal guide, but not for journal subscriptions.

For more information, call AMS at 501-224-8967.



In Fond Memory of AMS Past President James R. Weber, M.D.

"One of Jim Weber's greatest attributes was that he was an excellent advocate for, one, his patients and, two, the practice of medicine. He worked consistently and tirelessly for those causes. He has been an excellent role model for Arkansas Medical Society members in general and family physicians in particular. It has been my pleasure and great honor to work with him as an officer of the AMS and a great pleasure to have been able to visit with him personally on numerous occasions." Michael N. Moody, M.D., 1998-1999 AMS President

"Our future is our promise, and it will come one day at a time. What we do each day does make the difference."

"At any time in the history of medicine, there have always been great changes occurring, and today is no different. Our challenge for the future, as I see it, is to exert influence to make sure that these changes benefit the patients we serve and improve the environment of medical practice."

Excerpts from Dr. Weber's 1989 Inaugural Address.

James Ray Weber, M.D., 1989-1990 President of the Arkansas Medical Society, died Thursday, October 29, 1998, from a malignant brain tumor. He was 65. A Memorial Service was held on November 2 at 10 a.m. at the Temple B'Nai Israel in Little Rock.

Dr. Weber was a member of the Arkansas Medical Society for 37 years. He was currently serving as an Arkansas Delegate to the American Medical Association. For the Arkansas Medical Society, he also served as Chairman of the Committee on Medical Legislation and Secretary.

He was a past chairman of the board of the American Academy of Family Physicians and served as president from 1994 to 1995. He was also past president of the Arkansas Academy of Family Physicians. He served on the boards of many other professional organizations and was always active in his community. He was involved on a state and national level with legislative issues related to health care and testified before Congress eight times.

An avid outdoorsman, Dr. Weber enjoyed hunting, fishing, camping and outdoor cooking. He was a founding member of the Little Prairie Duck Club at Tichnor, a member of the Arkansas Polled Hereford Breeders Association where he served as president from 1970 to 1971 and a member of the Board of Governors of the Arkansas Livestock Exposition from 1969 to 1971.

Dr. Weber was born in Lebanon, Nebraska. Thinking that he would become a veterinarian, he earned a bachelor's degree in 1953 from the University of Nebraska College of Agriculture in Lincoln. After a change of heart regarding his career, he then went on to attend the University of Nebraska College of Medicine in Omaha where he received his medical degree in 1957.

From 1957 to 1958, Dr. Weber completed a rotating internship at the Madigan Army Hospital in Tacoma, Washington. His professional practice began in 1958 as a general medical officer with the United States Air Force. His military service was completed while stationed at Little Rock Air Force Base in Jacksonville. Having fallen in love with Arkansas, Dr. Weber stayed and opened a private practice in Jacksonville. He continued there until it was sold in the mid-'90s. He was chief of medical staff at Rebsamen Regional Medical Center in Jacksonville in 1964 and was also on staff at Baptist Medical Center, St. Vincent Infirmary and Doctors Hospital.

Believing that patients were best served by doctors who supported one another and shared their skills, Dr. Weber shared his knowledge and experience with his peers. He will be greatly missed and long remembered as a caring and competent physician and friend.

Memorials may be made to the Arkansas Academy of Family Physician Foundation for the Dr. James R. Weber Scholarship Fund, c/o Carla Coleman, 11330 Arcade Drive, Suite #8, Little Rock, AR 72212, or the James R. Weber, M.D., Endowment for Family Practice Residency Education, University of Arkansas for Medical Sciences, 4301 W. Markham, Slot 530, Little Rock, AR 72205.

New Members

BENTON

Cartaya, Daniel I., Internal Medicine. Medical Education, Hahnemann University School of Medicine, Philadelphia, Pennsylvania, 1995. Internship/Residency, Hahnemann University School of Medicine, Philadelphia, Pennsylvania, 1996/1998.

EL DORADO

Trevillyan, M. Jeanine, Emergency Medicine. Medical Education, UTESA, Santo Domingo, Dominican Republic, 1988. Residency, UAMS AHEC, 1997. Board certified.

FORT SMITH

Farris, Paul Estes, Otorhinolaryngology-Head & Neck Surgery. Medical Education, UAMS. Internship/Residency, University of Texas Southwestern Medical School, 1988/1993. Board certified.

Musick, Stanley L., Obstetrics/Gynecology. Medical Education, Baylor College of Medicine, Houston, Texas, 1982. Internship/Residency, Baylor Affiliated Hospitals, 1983/1986. Board certified.

HOT SPRINGS

Drake, Gary Michael, Emergency Medicine. Medical Education, University of North Texas Health Science Center, Ft. Worth, 1995. Internship/Residency, Texas Tech University Health Science Center, El Paso, 1996/1998.

Parchman, Anna Janette, Family Practice. Medical Education, UAMS, 1995. Internship/Residency, UAMS-AHEC, Texarkana, 1996/1998. Board certified.

St. John, Greg A., Cardiology. Medical Education, UAMS, 1990. Internship/Residency, UAMS, 1991/1993. Board certified.

LITTLE ROCK

Bruffett, Wayne Lynn, Orthopedic Surgery. Medical Education, Baylor College of Medicine, Houston, Texas, 1992. Internship/Residency, UAMS, 1993/1997.

Johns, Richard, Internal Medicine. Medical Education, Louisiana State University Medical Center, Shreveport, 1993. Internship/Residency, Louisiana State University, 1994/1998. Board eligible.

Liggin, Rebecca Lynn, Emergency Medicine & Pediatrics. Medical Education, University of Texas Health Science Center, Houston, Texas, 1993. Internship/Residency, Methodist Hospital of Indiana, Indiana University School of Medicine, 1994/1998.

Massey, Deborah A., Pediatrics. Medical Educa-

tion, University of Louisville School of Medicine, Louisville, Kentucky, 1995. Internship/Residency, UAMS, Arkansas Children's Hospital, 1996/1998. Board pending.

Perkins, Richard A., Anesthesiology. Medical Education, UAMS, 1994. Internship/Residency, UAMS, 1995/1998. Board eligible.

Stewart, Bobby Ray, Nuclear/Cardiology. Medical Education, Baylor College of Medicine, Houston, Texas, 1981. Internship/Residency, Baylor College of Medicine, 1983/1985. Board certified.

Vuppala, Murthy S., Kurnool Medical College, India, 1989. Internship/Residency, St. Mary's Health Center, St. Louis, Missouri, 1996/1998.

MOUNTAIN HOME

Wilson, Matthew Baker, Radiology. Medical Education, UAMS, 1991. Residency, UAMS, 1998. Board certified.

OZARK

Sico-Davis, Chrisandra Rey, Pediatrics. Medical Education, Far Eastern University – Nicanor Reyes Medical Foundation, Manila, Philippines, 1992. Internship/Residency, Bowman-Gray, WFU, North Carolina Baptist Hospital, Winston-Salem, 1995/1997. Board eligible.

PINE BLUFF

Gensler, Thomas Daniel, Preventive Medicine-Correctional Medicine. Medical Education, University of Nebraska college of Medicine, Omaha, Nebraska, 1963. Internship, Nebraska Methodist Hospital, 1964. Residency, MPH – Johns Hopkins and USAF Residency in Aerospace Medicine, 1977/1978. Board certified.

ROGERS

Henry, Mary Jo, Radiology. Medical Education, University of Tennessee College of Medicine, Memphis, Tennessee, 1994. Residency, UAMS, 1998. Board certified.

VAN BUREN

Lytle, Glenn H., General Surgery. Medical Education, University of Rochester School of Medicine-Dentistry, Rochester, New York, 1974. Internship/Residency, Yale University, 1975/1979. Board certified.

RESIDENTS

Edwards, F. Damon, Family Practice. Medical Education, St. George's University, Grenada West Indies/Bayshore, New York, 1997. Internship/Residency,

UAMS AHEC, Texarkana, 1998/presently.

Palvadi, Priti, Neurology. Medical Education, Gandhi Medical College, Hyderabad, India, 1989. Internship, Gandhi Medical College, India. Residency, UAMS.

Palvadi, Rajarama Mohana, Anesthesiology. Medical Education, Andhra Medical College, Visakha Patnam, India, 1984. Internship, King George Hospital, India. Residency, UAMS.

Rajs-Neponnashy, Roma, Internal Medicine. Medical Education, Medical Academy, Poland, 1981. Internship, Brooklyn Jersey Hospital, New York. Residency, UAMS.

Vuppala, Aparna, Psychiatry. Medical Education, Guntur Medical College, Andhra Pradesh, India, 1993. Internship, Wayne State University, Detroit Medical Center, 1996. Residency, St. Louis University/UAMS, 1998/presently.

STUDENTS

Jessica Suzanne Conn
Matthew Gordin Deneke
Jarrett B. Lea
John Pascal Simmons
Brent Thomas Stewart
Erik J. Young

Resolutions

Robert D. McKinney, M.D.

WHEREAS, God in His infinite mercy has seen fit to call from our midst on the sixteenth day of September 1998,

Robert D. McKinney, M.D.; and

WHEREAS, the members of the Sebastian County Medical Society note with sincere sorrow the death of our esteemed colleague; and

WHEREAS, Dr. McKinney was admired by his patients and will be long remembered as a gracious and caring man; and

WHEREAS, Dr. McKinney was a faithful member of this Society, giving generously of his time and talent;

BE IT THEREFORE RESOLVED:

THAT, this resolution be adopted and made a part of the permanent records of this Society; and

THAT, a copy be forwarded to the McKinney family as an expression of our sympathy; and

THAT, a copy be made available to *The Journal of the Arkansas Medical Society* for publication.

Adopted:

September 29, 1998

Myra C. Mosley, M.D.

President

Sebastian County Medical Society

J. Kenneth Thompson, M.D.

WHEREAS, God in His infinite mercy has seen fit to call from our midst on the fourth day of September 1998,

J. Kenneth Thompson, M.D.; and

WHEREAS, the members of the Sebastian County Medical Society note with sincere sorrow the death of a respected colleague; and

WHEREAS, Dr. Thompson has faithfully served his patients in the community at large throughout his entire medical career; and

WHEREAS, Dr. Thompson was a loyal member of this Society for many years, giving freely of his time to promote the interests of his fellow physicians;

BE IT THEREFORE RESOLVED:

THAT, this resolution be adopted and made a part of the permanent records of this Society; and

THAT, a copy be forwarded to the Thompson family as a token of our sympathy; and

THAT, a copy be made available to *The Journal of the Arkansas Medical Society* for publication.

Adopted:

September 29, 1998

Myra C. Mosley, M.D.

President

Sebastian County Medical Society

Things To Come

March 19 - 21, 1999

Clinical Infectious Disease '99: A Management Review for the Practicing Physician. The Waldorf-Astoria Hotel, New York, New York. Sponsored by the Center for Bio-Medical Communication, Inc. For more information, call 201-342-5300 or E-mail: cmeinfo@cbcbiomed.com.

March 29 - April 1, 1999

11th Annual National Managed Health Care Congress. Georgia World Congress Center, Atlanta, Georgia. For more information, call 888-882-2500.

April 23 - 24, 1999

Oncology in the New Millennium. The Ritz-Carlton Hotel, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

April 23 - 30, 1999

58th Annual American Occupational Health Conference. Ernest N. Morial Convention Center, New Orleans, Louisiana. Sponsored by the American Col-

lege of Occupational and Environmental Medicine. For more information, call 847-228-6850 extension 180; FAX: 847-228-1856; Internet: <http://www.acoem.org>

May 1 - 6, 1999

American Society of Colon and Rectal Surgeons Annual Meeting/Celebrating the Society's 100 Year Anniversary. Washington, D.C. For more information, call 847-290-9184; FAX: 847-290-9203; Website: <http://www.fascrs.org/>.

May 19 - 21, 1999

Peripheral Artery Disease: Contemporary Strategies for Diagnosis and Therapy. Heart House Learning Center, Bethesda, Maryland. Sponsored by the American College of Cardiology. For more information, call 800-253-4636 ext. 652 or FAX: 301-897-9745

June 7 - 9, 1999

Approach to Advanced Heart Failure: Medical and Surgical Options. Heart House Learning Center, Bethesda, Maryland. Sponsored by the American College of Cardiology. For more information, call 800-253-4636 ext. 652 or FAX: 301-897-9745

Keeping Up

Continuing Medical Education Opportunities in Arkansas

December 15, 1998

Dermatological Clinical Manifestation - St. Joseph's Regional Health Center, Mercy Room, Hot Springs. Time: 12:15 p.m. Lunch provided. Sponsored by St. Joseph's Regional Health Center. For more information, call (501) 622-1024.

January 19, 1999

Pain Management - St. Joseph's Regional Health Center, Mercy Room, Hot Springs. Time: 12:15 p.m. Lunch provided. Sponsored by St. Joseph's Regional Health Center. For more information, call (501) 622-1024.

January 22, 1999

Cerebrovascular Accidents - National Park Medical Center, Physicians Dining Room, Hot Springs. Time: 12:30 p.m. Lunch provided. Sponsored by National Park Medical Center. For more information, call (501) 620-1420.

February 12, 1999

Epidural or Spinal Hematoma with Concurrent Use of Low Molecular Weight Heparin and Spinal/Epidural Anesthesia - National

Park Medical Center, Physicians Dining Room, Hot Springs. Time: 12:30 p.m. Lunch provided. Sponsored by National Park Medical Center. For more information, call (501) 620-1420.

February 16, 1999

ARORA - St. Joseph's Regional Health Center, Mercy Room, Hot Springs. Time: 12:15 p.m. Lunch provided. Sponsored by St. Joseph's Regional Health Center. For more information, call (501) 622-1024.

February 23, 1999

Wound Care - St. Joseph's Regional Health Center, Mercy Room, Hot Springs. Time: 12:15 p.m. Lunch provided. Sponsored by St. Joseph's Regional Health Center. For more information, call (501) 622-1024.

February 26, 1999

Hyperlipidemia - National Park Medical Center, Physicians Dining Room, Hot Springs. Time: 12:30 p.m. Lunch provided. Sponsored by National Park Medical Center. For more information, call (501) 620-1420.

Keeping Up

Recurring Education Programs

The following organizations are accredited by the Arkansas Medical Society to sponsor continuing medical education for physicians. The organizations named designate these continuing medical education activities for the credit hours specified in Category 1 of the Physician's Recognition Award of the American Medical Association.

FAYETTEVILLE-VA MEDICAL CENTER

Medical Grand Rounds/General Medical Topics, Thursdays, 12:00 noon, Auditorium, Bldg. 3

FAYETTEVILLE-WASHINGTON REGIONAL MEDICAL CENTER

Chest Conference, 1st Wednesday of every month, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Grand Rounds Conference, 3rd Wednesday of every month, 7:30 - 8:30 a.m., Baker Conference Center, breakfast provided.
Primary Care Conferences, every Monday, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Tumor Conference, every Thursday, 7:30 - 8:30 a.m., WRMC, Baker Conference Center, no fee, breakfast provided

HARRISON-NORTH ARKANSAS MEDICAL CENTER

Cancer Conference, October 22, November 3, and December 22, 12:00 noon, Conference Room

HOT SPRINGS-ST. JOSEPH'S REGIONAL HEALTH CENTER

Cancer Conference, every Monday, 12:15 p.m., St. Joseph's Mercy Room.
Chest Conference, Quarterly on last Tuesday of month beginning November 24, 12:15 p.m., St. Joseph's Mercy Room.
Medicine Not So Grand Rounds, Second Tuesday each month, 12:15 p.m., St. Joseph's Mercy Room. Lunch provided.

LITTLE ROCK-ST. VINCENT INFIRMARY MEDICAL CENTER

Cancer Conferences, Thursdays, 12:00 noon, Southwestern Bell/Arkla room. Lunch provided.
General Surgery Grand Rounds, 1st Thursday, 7:00 a.m. Southwestern Bell/Arkla Room. Light breakfast provided.
Interdisciplinary AIDS Conference, 2nd Friday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Journal Club, Tuesdays, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Pulmonary Conference, 4th Wednesday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.

LITTLE ROCK-BAPTIST MEDICAL CENTER

Breast Conference, 3rd Thursday, 7:00 a.m., J.A. Gilbreath Conference Center
Gastroenterology/Surgery Journal Club, dates vary, AR Gastroenterology Memorial Medical Plaza, Suite 3A. Call 501- 202-2673 or 202-3888 for more information.
Grand Rounds Conference, Wednesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Pulmonary Conference, Tuesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Sleep Disorders Case Conference, dates vary, 12:00 noon. Call 202-2673 for date and location. Lunch provided.

MOUNTAIN HOME-BAXTER COUNTY REGIONAL HOSPITAL

Lecture Series, 3rd Tuesday, 6:30 p.m., Education Building
Tumor Conference, Tuesdays, 12:00 noon, Carti Boardroom

The University of Arkansas College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor the following continuing medical education activities for physicians. The Office of Continuing Medical Education designates that these activities meet the criteria for credit hours in category 1 toward the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

LITTLE ROCK-ARKANSAS CHILDREN'S HOSPITAL

Faculty Resident Seminar, 3rd Thursday, 12:00 noon, Sturgis Auditorium
Genetics Conference, Wednesdays, 1:30 p.m., Conference Room, Springer Building
Infectious Disease Conference, 2nd Wednesday, 12:00 noon, 2nd Floor Classroom
Pediatric Grand Rounds, Tuesdays, 8:00 a.m., Sturgis Bldg., Auditorium
Pediatric Neuroscience Conference, 1st Thursday, 8:00 a.m., 2nd Floor Classroom
Pediatric Pharmacology Conference, 5th Wednesday, 12:00 noon, 2nd Classroom
Pediatric Research Conference, 1st Thursday, 12:00 noon, 2nd Floor Classroom

LITTLE ROCK-UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

ACRC Multi-Disciplinary Cancer Conference (Tumor Board), Wednesdays, 12:00 noon, ACRC 2nd floor Conference Room.
Anesthesia Grand Rounds/M&M Conference, Tuesdays, 6:00 a.m., UAMS Education III Bldg., Room 0219.
Autopsy Pathology Conference, Wednesdays, 8:30 a.m., VAMC-LR Autopsy Room.
Cardiology-Cardiovascular & Thoracic Surgery Conference, Wednesdays, 11:45 a.m., UAMS, Shorey Bldg., room 3S/06
Cardiology Grand Rounds, 2nd & 4th Mondays, 4:00 p.m., UAMS Shorey Bldg., 3S/06
Cardiology Morning Report, every morning, 7:30 a.m., UAMS, Shorey Bldg. room 3S/07
Cardiothoracic Surgery M&M Conference, 2nd Saturday each month, 8:00 a.m., UAMS, Shorey Bldg. room 2S/08
CARTI/Searcy Tumor Board Conference, 2nd Wednesday, 12:30 p.m., CARTI Searcy, 405 Rodgers Drive, Searcy.

Centers for Mental Healthcare Research Conference, 1st & 3rd Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research
 CORE Research Conference, 2nd & 4th Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research
 Endocrinology Grand Rounds, Fridays, 12:00 noon, ACRC Bldg., Sam Walton Auditorium, 10th floor
 Gastroenterology Grand Rounds, Thursdays, 4:00 p.m., UAMS Hospital, room 3D29 (1st Thurs. at ACH)
 Gastroenterology Pathology Conference, 4:00 p.m., 1st Tuesday each month, UAMS Hospital
 GI/Radiology Conference, Tuesdays, 8:00 a.m., UAMS Hospital, room 3D29
 In-Vitro Fertilization Case Conference, 2nd & 4th Wednesdays each month, 11:00 a.m., Freeway Medical Tower, Suite 502 Conf. rm
 Medical/Surgical Chest Conference, each Monday, 4:00 p.m., UAMS Hospital, room M1/293
 Medicine Grand Rounds, Thursdays, 12:00 noon, UAMS Education II Bldg., room 0131
 Medicine Research Conference, one Wednesday each month, 4:30 p.m. UAMS Education II Bldg. room 0131A
 Neuropathology Conference, 2nd Wednesday each month, 4:00 p.m., AR State Crime Lab, Medical Examiner's Office
 Neurosurgery, Neuroradiology & Neuropathology Case Presentations, Thursdays, 4:00 p.m., UAMS Hospital
 OB/GYN Fetal Boards, 2nd Fridays, 8:00 a.m., ACH Sturgis Bldg.
 OB/GYN Grand Rounds, Wednesdays, 7:45 a.m., UAMS Education II Bldg., room 0141A
 Ophthalmology Problem Case Conference, Thursdays, 4:00 p.m., UAMS Jones Eye Institute, 2 credit hours
 Orthopaedic Basic Science Conference, Tuesdays, 7:30 a.m., UAMS Education II Bldg., room B/107
 Orthopaedic Bibliography Conference, Tuesdays, Jan. - Oct., 7:30 a.m., UAMS Education II Bldg.
 Orthopaedic Fracture Conference, Tuesdays, 9:00 a.m., UAMS Education II Bldg., room B/107
 Orthopaedic Grand Rounds, Tuesdays, 10:00 a.m., UAMS Education II Bldg., room B/107
 Otolaryngology Grand Rounds, 2nd Saturday each month, 9:00 a.m., UAMS Biomedical Research Bldg., room 205
 Otolaryngology M&M Conference, each Monday, 5:30 p.m., UAMS Otolaryngology Conf. room
 Perinatal Care Grand Rounds, every Tuesday, 12:15 p.m., BMC, 2nd floor Conf. room
 Psychiatry Grand Rounds, Fridays, 11:00 a.m., UAMS Child Study Center Auditorium
 Surgery Grand Rounds, Tuesdays, 8:00 a.m., ACRC Betsy Blass Conf.
 Surgery Morbidity & Mortality Conference, Tuesdays, 7:00 a.m., ACRC Betsy Blass conference room, 2nd floor
 NLRVA Geriatric/Medicine Grand Rounds, Thursdays, 8:00 a.m., VAMC-NLR, Bldg 68, room 130
 VA Medical Service Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D109
 VA Pathology-Hematology/Oncology-Radiology Patient Problem Conference, Thursdays, 8:15 a.m., VAMC-LR, room 2E142
 VA Psychiatry Difficult Case Conference, 4th Monday, 12:00 noon, VAMC-NLR, Mental Health Clinic
 VA Lung Cancer Conference, Thursdays, 3:00 p.m., VAMC-LR, room 2E142
 VA Medical Service Teaching Conference, Thursdays, 8:00 a.m., VAMC-NLR, Bldg. 68 room 130
 VA Medicine-Pathology Conference, Tuesday, 2:00 p.m., VAMC-LR, room 2D109
 VA Medicine Resident's Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D08
 VA Physical Medicine & Rehab Grand Rounds, 4th Friday, 11:30 a.m., VAMC-NLR Bldg. 68, room 118 or Baptist Rehab Institute
 VA Surgery Grand Rounds, Thursdays, 12:45 p.m., VAMC-LR, room 2D109, 1.25 credit hours
 VA Topics in Rehabilitation Medicine Conference, 2nd, 3rd, & 4th Thursdays, 8:00 a.m., VAMC-NLR Bldg. 68, room 118
 VA Weekly Cancer Conference, Monday, 3:00 p.m., VAMC-LR, room 2E-142
 White County Memorial Hospital Medical Staff Program, once monthly, dates & times vary, White County Memorial Hospital, Searcy

EL DORADO-AHEC

Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., Warner Brown Campus, 6th floor Conf. Rm.
 Behavioral Sciences Conference, 1st & 4th Friday, 12:15 p.m., AHEC - South Arkansas
 Chest Conference, 3rd Wednesday, 12:15 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.
 Dermatology Conference, 1st Tuesdays and 1st Thursdays, AHEC - South Arkansas
 GYN Conference, 2nd Friday, 12:15 p.m., AHEC-South Arkansas
 Internal Medicine Conference, 1st, 2nd & 4th Wednesday, 12:15 p.m., AHEC-South Arkansas
 Noon Lecture Series, 2nd & 4th Thursday, 12:00 noon, Union Medical Campus, Conf. Rm. #3. Lunch provided.
 Obstetrics-Gynecology Conference, 4th Thursday, 12:15 p.m., AHEC - South Arkansas
 Pathology Conference, 2nd Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5. Lunch provided.
 Pediatric Conference, 3rd Friday, 12:15 p.m., AHEC - South Arkansas
 Pediatric Case Presentation, 3rd Tuesday, 3rd Friday, AHEC - South Arkansas
 Surgical Conference, 1st, 2nd & 3rd Monday, 12:15 p.m., AHEC - South Arkansas
 Tumor Clinic, 4th Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5, Lunch provided.
 VA Hematology/Oncology Conference, Thursdays, 8:15 a.m., VAMC-LR Pathology conference room 2E142

FAYETTEVILLE-AHEC NORTHWEST

AHEC Teaching Conferences, Tuesdays & Wednesdays, 12:00 noon, AHEC Classroom
 AHEC Teaching Conferences, Fridays, 12:00 noon, AHEC Classroom
 AHEC Teaching Conferences, Thursdays, 7:30 a.m., AHEC Classroom
 Medical/Surgical Conference Series, 4th Tuesday, 12:30, Bates Medical Center, Bentonville

FORT SMITH-AHEC

Grand Rounds, 12:00 noon, first Wednesday of each month, Sparks Regional Medical Center
 Neuroradiology Conference, 1st Tuesday of each month, 12:00 noon, Sparks Regional Medical Center, 7th floor dining room
 Neuroscience & Spine Conference, 3rd Wednesday each month, 12:00 noon, St. Edward Mercy Medical Center
 Tumor Conference, Mondays, 12:00 noon, St. Edward Mercy Medical Center
 Tumor Conference, Wednesdays, 12:00 noon, Sparks Regional Medical Center

JONESBORO-AHEC NORTHEAST

AHEC Lecture Series, 1st & 3rd Tuesday, 12:00 noon, Stroud Hall, St. Bernard's Regional Medical Center. Lunch provided.
Arkansas Methodist Hospital CME Conference, 7:30 a.m., Hospital Cafeteria, Arkansas Methodist Hospital, Paragould
Chest Conference, 2nd Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Citywide Cardiology Conference, 3rd Thursday, 7:30 p.m., Jonesboro Holiday Inn
Clinical Faculty Conference, 5th Tuesday, St. Bernard's Regional Medical Center, Dietary Conference Room, lunch provided
Craighead/Poinsett Medical Society, 1st Tuesday, 7:00 p.m. Jonesboro Country Club
Greenleaf Hospital CME Conference, monthly, 12:00 noon, Greenleaf Hospital Conference Room. Lunch provided.
Independence County Medical Society, 2nd Tuesday, 6:30 p.m., Batesville Country Club, Batesville
Interesting Case Conference, 4th Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Jackson County Medical Society, 3rd Thursday, 7:00 p.m., Newport Country Club, Newport
Kennett CME Conference, 3rd Monday, 12:00 noon, Twin Rivers Hospital Cafeteria, Kennett, MO
Methodist Hospital of Jonesboro Cardiology Conference, every other month, 7:00 p.m., alternating between Methodist Hospital Conference Room and St. Bernard's, Stroud Hall. Meal provided.
Methodist Hospital of Jonesboro CME Conference, 2nd Tuesday, 7:00 p.m., Cafeteria, Methodist Hospital of Jonesboro
Neuroscience Conference, 3rd Monday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch Provided.
Orthopedic Case Conferences, every other month beginning in January, 7:30 a.m., Northeast Arkansas Rehabilitation Hospital
Perinatal Conference, 2nd Wednesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Piggott CME Conference, 3rd Thursday, 6:00 p.m., Piggott Hospital. Meal provided.
Pocahontas CME Conference, 3rd Wednesday, 12:00 noon & 7:30 p.m., Randolph County Medical Center Boardroom
Tumor Conference, Thursdays, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Walnut Ridge CME Conference, 3rd & last Tuesday, 12:00 noon, Lawrence Memorial Hospital Cafeteria
White River CME Conference, 3rd Thursday, 12:00 noon, White River Medical Center Hospital Boardroom

PINE BLUFF-AHEC

Behavioral Science Conference, 1st & 3rd Thursday, 12:00 noon, Jefferson Regional Medical Center
Chest Conference, 2nd & 4th Friday, 12:00 noon, Jefferson Regional Medical Center
FP Journal Club, 2nd Monday, 12:00 noon, Jefferson Regional Medical Center
Internal Medicine Conference, 2nd & 4th Thursdays, 12:00 noon, Jefferson Regional Medical Center
Obstetrics/Gynecology Conference, 2nd Tuesday, 12:00 noon, Jefferson Regional Medical Center
Orthopedic Case Conference, 2nd & 4th Wednesdays, 12:00 noon, Jefferson Regional Medical Center.
Pediatric Conference, 3rd Wednesday, 12:00 noon, Jefferson Regional Medical Center
Radiology Conference, 3rd Tuesday, 12:00 noon, Jefferson Regional Medical Center
Southeast Arkansas Medical Lecture Series, 4th Tuesday, 6:30 p.m., Locations vary. Dinner meeting.
Tumor Conference, 1st Wednesday & 3rd Friday, 12:00 noon, Jefferson Regional Medical Center

TEXARKANA-AHEC SOUTHWEST

Chest Conference, every other 3rd Tuesday/quarterly, 12:00 noon, St. Michael Health Care Center
Neuro-Radiology Conference, 1st Thursday every month at St. Michael Health Care Center and 3rd Thursday of every month at Wadley Regional Medical Center, 12:00 noon.
Residency Noon Conference, Monday, Wednesday, Thursday, Friday each week, alternates between St. Michael Health Care Center & Wadley Regional Medical Center
Tumor Board, Fridays, except 5th Friday, 12:00 noon, Wadley Regional Medical Center & St. Michael Hospital
Tumor Conference, every 5th Friday, 12:00 noon alternates between Wadley Regional Medical Center & St. Michael Hospital



Continuing Medical Education Contacts:

*The following is a list of telephone numbers physicians
can call for more information on CME activities*

Little Rock
Arkansas Medical Society
501-224-8967

Fayetteville
VA Medical Center
501-444-5050

Fayetteville
Washington Regional
Medical Center
501-442-1823

Harrison
North Arkansas
Medical Center
870-365-2098

Hot Springs
National Park
Medical Center
501-620-1420

Hot Springs
St. Joseph's Regional
Health Center
501-622-1024

Little Rock
St. Vincent Infirmary
Medical Center
501-660-3592
or 501-660-3594

Little Rock
Baptist Medical Center
501-202-2673

Mountain Home
Baxter County
Regional Hospital
870-424-1760

Little Rock
Arkansas Children's
Hospital
501-320-1248

Little Rock
UAMS
501-661-7962

El Dorado
AHEC
870-862-2489

Fayetteville
AHEC
501-521-8260

Fort Smith
AHEC
501-785-2431

Jonesboro
AHEC
870-972-0063

Pine Bluff
AHEC
870-541-7611

Texarkana
AHEC
870-779-6016

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as of November 10, 1998



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Arkansas Medical Society Membership Roster

as of November 10, 1998

Denotes deceased member

Please note: If you cannot find a particular physician in the county listings, look under the Direct Member Section beginning on page 322. Direct Member indicates AMS members who are not members of their county medical society or whose county membership was pending at the time of this journal's printing.

Arkansas County

Burleson, Stan W.
Chavin, Michael A.
Daniel, Noble B. III
Elam, Garrett
Ferrari, Victor J. Jr.
Hestir, John M.
Millar, Paul H. Jr.
Morgan, Jerry D.
Northcutt, Carl E.
Pritchard, Jack L.
Speer, Hoy B. Jr.
Speer, Marolyn N.
Tracy, W. Lee
Wood, Gary P.
Yelvington, Dennis B.

Ashley County

Burt, Frederick N.
Garcia, Luis F.
Gresham, Edward A.
Heder, Guy W.
Henry, William Jr.
Rankin, James D.
Salb, Robert L.
Spohn, Peter J.
Thompson, Barry V.
Toon, D. L.
Walsh, Benjamin J.
Wilson, Alan K.

Baxter County

Baker, Robert L.
Barker, Monty
Barnes, Gregory
Beck, Dennis
Chatman, Ira D.
Cheney, Maxwell G.
Chock, Daniel P.
Chock, Helga E.
Clarke, James S.
Condrey, Yoland M.
Douglas, Donald S.
Dyer, William
Dykstra, Peter C.
Elders, John Gregory
Foster, Robert D.
Hagaman, Michael S.
Hardin, Philip R.
Johnson, Stacey M.
Kelley, Lawrence A.
Kerr, Robert L.
Kilgore, Kenneth M.

Knox, Thomas E.
Landrum, William
Lincoln, Lance
MacKercher, Peter A.
Massey, James Y.
McAlister, Matthew
McBride, Anthony D.
Neis, Paul R.
Price, Michael D.
Regnier, George G.
Rigler, Wilson F.
Robbins, Bruce
Roberts, David H.
Saltzman, Ben N.
Simons, Roger D.
Sneed, John W. Jr.
Stahl, Ray E. Jr.
Sward, David T.
TerKeurst, John
Trager, Marc
Tullis, Joe M.
Wells, Gary
White, Richard B.
Wilbur, Paul F.
Wilson, Jack C.

Benton County

Addington, Alfred R.
Alderson, Roger
Allen, L. Barry
Arkins, James
Ball, Eugene H.
Becton, Paul Jr.
Benjamin, George
Black, Randall Wayne
Bledsoe, James H.
Boden, Donna
Boozman, Fay W. III
Cantwell, Janet
Clemens, R. Dale
Clower, John D.
Cohagan, Donald L.
Cole, Randall E.
Compton, Neil E.
Costaldi, Mario E.
Cuchia, John
Dang, Minh-Tam
Day, Geoffrey
Deatherage, Joseph R.
Diacon, W. Lindley
Donnell, Hugh Garland
Donnell, Robert W.
Elkins, James P.

Ewart, David
Fioravanti, Bernard L.
Friesen, Douglas L.
Garrett, David C. III
Goss, Stephen
Halinski, David
Harmon, Harry M.
Henderson, Oscar L.
Hitt, Jerry L.
Hof, C. William
Holder, Robert E.
Horner, Glennon A.
Howard, K. Lamar
Hull, Robert R.
Huskins, James D.
Huskins, John A.
Jennings, William E. #
Johnson, Christopher S.
Johnson, Royce Oliver II
Johnson, Steven P.
Jones, Nancy
Keane, Patrick K.
Lanier, Karen A.
Lewis, Rebecca C.
Marciniak, Douglas L.
McCollum, Edward #
McCollum, William
McKnight, William D.
Mertz, John Douglas
Moose, John I.
Mullins, Neil D.
Neaville, Gary A.
Nugent, Loyd
Papageorge, Dean
Pappas, John J.
Pearson, Richard N.
Pickens, James L.
Platt, Michael R.
Poemoceah, Kenneth M.
Puckett, Billy J.
Reese, Michael C.
Revard, Ronald
Ritz, Ralph C.
Rollow, John A.
Rolniak, Wallace A.
Springer, Dan J.
Steadman, Hunter M. Jr.
Stinnett, Charles H.
Stinnett, Scott G.
Stolzy, Sandra
Summerlin, William T.
Swaim, Terry J.
Swindell, William G.

Tate, Jeffrey
Treptow, Douglas
Turley, Jan T.
Warren, Grier D.
Weaver, Robert H.
Webb, William
Whiteside, Edwin
Wright, Larry D.
Youngblood, Thomas

Boone County

Abdelaal, Ali F.
Ashe, Barbara
Bell, Thomas Edward
Bennett, Joe D.
Brandon, Henry
Casey, Rick E.
Chambers, Carlton L. III
Chambers, Sue
Clary, Cathy
Collins, Kenneth
Daniel, Charles D.
Dunaway, Geoffrey
Ferguson, Noel F.
Flanigan, Stevenson
Fowler, Ross E. #
Helmling, Robert L.
Hope, John M.
Kim, Hyewon
Klepper, Charles R.
Langston, James David
Langston, Robert H.
Langston, Thomas A.
Ledbetter, Charles A.
Leslie, Sharron J.
Maes, Stephen R.
Mahoney, Paul L. Jr.
Maris, Mahlon O.
Mears, Bill
Miller, Robert Jr.
Moffett, Shirolyn R.
Padilla, Jose S. Jr.
Reese, Ronald R.
Scroggie, Daniel J. #
Scroggins, Sam J.
Stensby, Harold F.
Van Ore, Stevan Michael
Vowell, Don R.
Williams, Rhys A.

Bradley County

Chambers, F. David
Foscue, David

Marsh, James W.
Pennington, Kerry F.
Purvis, Kenneth W.
Wharton, Joe H.
Wynne, George F.

Carroll County

Card, Shannon R.
Flake, William K.
Horton, Charles
Kresse, Gregory
Lawrence, Neal C.
Martinson, Alice
Murphy, Sean P.
Nash, John R.
Ricciardi, Joseph M.
Rose, Steve
Spann, Eric G.
Spurgin, Randal T.
Taylor, Richard L.
Wallace, Oliver
Warner, Milo N.

Chicot County

Burge, John P.
Kronfol, Ned
Russell, John R.
Smith, Major E.
Thomas, H. W.
Tuangsithtanon, T.
Weaver, William J.
Wilson, Thomas C.

Clark County

Anderson, P. R.
Balay, John W.
Bryan, Yvon F.
Dorman, Robert A.
Elkins, John S.
Ford, Michael Ray
Fullerton, John C. III
Hagood, Noland Jr.
Jansen, Mark
Kennedy, Edmund
Kluck, Carl Jr.
Lowry, James L.
McLeod, Kevin
Peeples, George R.
Taylor, George D.
Teed, Frank S.

Cleburne County

Ashabranner, Wesley J.
Baldridge, Max
Barnett, Michael
Beasley, Harold
Bivins, Franklin Jr.
Lambert, James C.
Quinn, Cynthia D.
Sharp, Jan

Stone, Timothy
Thomas, Jerry L.
Tvedten, Tom
Vaughan, G. Lee

Columbia County

Alexander, John E. Sr.
Alexander, John E. Jr.
Dickson, D. Bud
Evans, Matthew L.
Farmer, John M.
Griffin, Rodney L.
Hester, Joe D.
Kelley, Charles W.
McMahen, H. Scott
Murphy, Fred Y.
Parkman, Robert L. Jr.
Pullig, Thomas A.
Roberts, Franklin D.
Ruff, John L. #
Walker, Jack T.
Wynn, Chester

Conway County

Hickey, Thomas H.
Lipsmeyer, Keith M.
Owens, Gastor B.
Wells, Charles F.

Craighead-Poinsett County

Allen, John M.
Alston, Herman D.
Ameika, James A.
Aston, J. Kenneth
Awar, Ziad
Ball, John
Barker, Charles
Basinger, James W.
Berry, Donald M.
Berry, Michael P.
Blaylock, Jerry D.
Bolt, Michael E.
Boyd, John T.
Braden, Terence P. III
Brown, Mark C.
Burns, Richard G.
Burns, Robert
Bush, Steven B.
Carpenter, Kennan
Chan, Kenneth
Clopton, Owen H. Jr.
Cohen, Jeffrey O.
Cohen, Robert S.
Collins, Kevin Basil
Cook, John
Cranfill, Ben
Cranfill, General L. III
Crawley, Michael E.

Day, Thomas Elkins
Diamond, Kevin
Dickson, Glenn E.
Dow, J. Timothy
Dudley, Millicent
Duke, Billy L. II
Dunn, Charles C.
Eddington, William R.
Edwards, Carl B.
Emerson, Steven
Felts, Larry S.
Fields, L. Brad
Foote, John W.
Forestiere, A. J.
Fowler, William
Ganong, Kevin Donald
Garner, B. Matt
Garner, William L.
George, F. Joseph
Golden, Stephen C.
Gossett, Clarence E.
Green, Terri
Green, William Robert
Guinn, Donald R.
Hackbarth, Mark A.
Hall, Ray H. Jr.
Harvey, Bryan
Hiers, Connie L.
Hightower, Michael D.
Hill, Roger D.
Hogue, Ernest L.
Hoke, W. Scott
Hornbeck, Robert G.
Houchin, Vonda
Hurst, William
Isaacson, Michael L.
Jennings, R. Duke
Jiu, John B.
Johnson, Arlene L.
Johnson, John A.
Johnson, John S.
Johnson, Larry H.
Johnson, Roehl W.
Jones, K. Bruce
Jones, R. J.
Keisker, Henry W.
Kemp, Charles E.
Kroe, Donald J.
Kyle, Richard
Labor, Penny M.
Labor, Phillips K.
Landry, Robert J.
Lansford, Bryan
Lawrence, Robert O. Jr.
Ledbetter, Joseph W.
Lepore, Diane G.
Levinson, Mark
Lewis, David M.
Lunde, Stephen P.
Luter, Dennis W.

Lynch, John
Mackey, Michael
Maglothin, Douglas L.
Mahon, Larry E.
Marzewski, David
McClurkan, Michael
McDaniel, Craig A.
McKee, Sanders
Modelevsky, Aaron C.
Monte, Marc
Montgomery, Earl W.
Moseley, Claiborne II
Murrey, James F.
Nance, Mel
Owen, Kip
Owens, Ben Jr.
Parten, Dennis
Patel, Dharmendra V.
Patel, Suresh
Phillips, John K.
Pinkard, John
Porter, Revel D.
Price, Edwin F.
Price, Herbert H. III
Pryor, Shapard Jr.
Ragland, Darrell G.
Rainwater, W. T.
Rauls, Stephen R.
Ricca, Dallis
Ricca, Gregory F.
Richards, Fraser M.
Rogers, James F.
Rusher, Albert H. Jr.
Sales, Joseph Hugh
Sanders, James W.
Sapiro, Gary S.
Savage, Patrick Joseph
Schrantz, James L.
Scriber, Ladd J.
Scroggin, Carroll D. Jr.
Shanlever, William T.
Sifford, Mark
Silas, David
Skaug, Phyllis
Skaug, Warren A.
Smith, Floyd A. Jr.
Smith, Michael J.
Smith, Vestal B.
Sneed, Jane
Snodgrass, Scot J.
South, Ronald
Sparks, Barrett
St Clair, John T. Jr.
Stainton, Joseph C.
Stainton, Robert M. Jr.
Stallings, Joe H. Jr.
Stank, Thomas M.
Stevenson, Richard
Stidman, Jeff
Stripling, Mark C.

Stroope, Henry F.
 Stubblefield, Sandra
 Stubblefield, William
 Swingle, Charles G.
 Swyden, Steven Neal
 Tagupa, Eumar
 Taylor, Robert D.
 Tedder, Barry C.
 Tedder, Michael E.
 Templeton, Gary L.
 Thomas, Gary A.
 Tidwell, Kenneth Jr.
 Tonymon, Kenneth
 Tuck, Rebecca
 Vines, Troy Alan
 Vollman, Don B. Jr.
 Walker, Meredith M.
 Warner, Robert L. Jr.
 White, Anthony T.
 Wiggins, H. Lynn
 Williams, E. Walden
 Wilson, Joe T. Jr.
 Wisdom, Garland Durwood #
 Woloszyn, John
 Wood, Mark Cole
 Woodward, Gary W.
 Young, William C. Jr.

Crawford County

Archer, Ernest W.
 Darden, Lester R.
 Delk, John II
 Doyle, Edward
 Edds, Millard C.
 Edwards, Henry N.
 Flanagan, Mary Clare
 Floyd, Rebecca R.
 Garrett, Kipton L.
 Heaver, Holly M.
 Hefner, David P.
 Jennings, Charles A.
 Katz, Catherine
 Lytle, Glenn H.
 Mason, Joe N.
 Ross, R. Wendell
 Sasser, L. Gordon III
 Schlabach, Ronald D.
 Travis, A. Lawrence

Crittenden County

Adler, Justin Jr.
 Arnold, Sidney W.
 Barr, Marian
 Bryant, G. Edward Jr.
 Clemons, Mark
 DeRossitt, James P. III
 Deneke, Milton D.
 Evans, Loraine J.
 Ferguson, Scott
 Ferguson, T. Murray

Ford, David W.
 Ford, Robert C. Jr.
 Goodman, David Aaron
 Greene, Robert W. Jr.
 Gregory, Sandra L.
 Hanson, Charles C.
 Hernandez, Jacinto
 Huffstutter, Paul J.
 Kaplan, Bertram
 Kennedy, Keith B. #
 L'Heureux, Guy J.
 Lum, Diane
 Meredith, Samuel G. Jr.
 Miller, James L.
 Moissidis, Ioannis
 Murray, Ian F.
 Nadeau, Kenneth R.
 Peeples, Chester W. Jr.
 Peeples, Guy Langley
 Pierce, Trent P.
 Rudorfer, Bennett Lewis
 Ruiz, Julio P.
 Schoettle, Steve P.
 Shrader, Floyd R.
 Smith, Bedford W.
 Utley, L. Thomas
 Wah, John
 Ward-Jones, Susan
 Webb, Dan W.
 Westmoreland, Daniel
 Wright, William J.

Cross County

Beaton, J. Trent
 Beaton, Kenneth E.
 Bethell, Robert D.
 Burks, Willard G.
 Crain, Vance J.
 Hayes, Robert A. Jr.
 Jacobs, James R.
 Rindt, Phillip Lee
 Sajjad, Rehan

Dallas County

Delamore, John H.
 Howard, Don G.
 Nutt, Hugh A.
 Suphan, Neema A.

Desha County

Asemota, Steve
 Go, Peter Kong Hua
 Harris, Howard R.
 Hejmej, Ryszarda M.
 Masquil, Filipe
 Prosser, Robert L. III
 Savu, Calin A.
 Scott, Robert B.
 Turney, Lonnie R.
 Young, James E.

Drew County

Azhar, Muhammad Fahee
 Burns, Robert E.
 Busby, Arlee K.
 Connelley, Jay
 Gordon, Leonard F.
 Maxwell, Ralph M.
 Ridout, Robert G. III.
 Wallick, Paul A.
 Williams, William III
 Wilson, Harold F.

Faulkner County

Arnold, Robert S.
 Beasley, Margaret D.
 Beasley, Thomas O.
 Bell, F. Keith
 Bowlin, Randal
 Bowman, Gary
 Carter, D. Mike
 Cheek, Ben H.
 Cole, Andrew
 Collins, Mitchell L.
 Connaughton, Michael A.
 Cummins, J. Craig
 Daniel, Sam V.
 Dixon, Jerry W.
 Dodge, Ben
 France, Diane P.
 Furlow, William C.
 Garrison, James S.
 Ghormley, J. Tod
 Gordy, L. Fred Jr.
 Gray, George T. III
 Gullic, Phillip T.
 Hendrickson, Richard O. Jr.
 Hudson, Thomas F. III
 Jackson, Carole
 Landberg, Karl H.
 Landgren, Robert C.
 Lewis, Gregory
 Magie, Jimmie J.
 Martin, David A.
 McCarron, Robert
 McChristian, Paul L.
 Murphy, Kenneth
 Norris, Lloyd P.
 Raney, Herschel D. Jr.
 Roberts, Thomas
 Ross, Rex W.
 Shaw, Collie B.
 Shirley, David C.
 Simpson, Laura K.
 Smith, John D.
 Smith, Lander A.
 St. Amour, Scott C.
 Stancil, Vicki
 Stone, Phillip
 Throneberry, Bart
 Tsuda, Sue

Woodard, Eric
 Wright, Gary David

Franklin County

Brooks, Homer E.
 Gibbons, David L.
 Lachowsky, John
 Long, C. C.
 Sico-Davis, Chrisandra R.
 Smith, John C.
 Wilson, Robert

Garland County

Abraham, Jacob E.
 Agee, Kimberly R.
 Angel, Carol
 Arthur, James M.
 Aspell, Robert
 Bandy, Preston R.
 Bearden, Jeffrey C.
 Bennett, Keith
 Bodemann, Diane
 Bodemann, Donald R.
 Bodemann, Michael C.
 Bodemann, Stephen L.
 Bohnen, Loren O.
 Boos, Donald Jr.
 Borg, Robert V.
 Borland, Judy
 Bracken, Ronald J.
 Braley, Richard E.
 Braun, James R.
 Brunner, John H.
 Burton, Frank M.
 Burton, James F.
 Campbell, James W.
 Cates, Jack A.
 Cenac, Joseph W. Jr.
 Corbitt, Mark A.
 Cunningham, Mark
 Cupp, Cecil W. III
 Cyrus, Scott S.
 Davis, Kristie L.
 Davis, Sheryl L.
 Dodson, John W. Jr.
 Dolan, Patrick III
 Dunn, Richard W.
 Dykman, Kathryn
 Eisele, W. Martin
 English, P. Timothy
 Finch, Richard R.
 Fine, B.D. Jr.
 Fore, Robert W.
 Fotioo, George J.
 French, James H.
 Gammill, Todd
 Gardial, J. Richard
 Gardner, James L.
 Garrett, W. Michael
 Gerber, Allen D.

Gocio, Allan C.
 Griffin, James E.
 Grose, Andrew
 Haggard, John L.
 Hale, Kevin D.
 Hardy, Ross A.
 Harper, Edwin L.
 Headrick, Daniel
 Hechanova, D. M. Jr.
 Heinemann, Fred M.
 Heinemann, Phyllis E.
 Henderson, Francis M.
 Herrold, Jeffrey W.
 Hickman, Michael P.
 Hill, H. Randy
 Hill, Robert L.
 Hitt, W. C. Jr.
 Hollis, Thomas H.
 Howe, H. Joe
 Hughes, James A.
 Hulsey, Matthew
 Humphreys, Robert P.
 Hunter, Karla
 Irwin, William G.
 Jackson, Brian D.
 Jackson, Haynes G.
 Jackson, Haynes G. Jr.
 Jayaraman, K. K.
 Jayaraman, Vilasini D.
 Jayne, Russell P.
 Johnson, Paulette S.
 Johnson, Robert D.
 Johnston, Gaither C.
 Josef, Stanley
 Kaler, Ron A.
 Keadle, William R.
 Kincheloe, A. Dale
 Kleinhenz, Robert W.
 Klugh, Walter G. Jr.
 Koehn, Martin A.
 Larey, Mark E.
 LeMay, Thomas B.
 Lee, Allen R.
 Lee, William R.
 Lennon, Yates
 Lyles, Fred
 Martin, Jana
 Martin, Joan B.
 Maruthur, Gopakumar
 Mashburn, William R.
 McCrary, Robert F. Jr.
 McFarland, Louis R.
 McMahan, James
 Meek, Gary N.
 Mullins, Michael
 Munos, Louis R.
 Olive, Robert Jr.
 Padmini, Rangaswami
 Pai, Balakrishna
 Pappas, Deno P.

Parkerson, Cecil W.
 Peeples, Raymond E.
 Pellegrino, Richard
 Plaza, Jesus' A.
 Powell, Brenda
 Queen, George P.
 Rainwater, W. Sloan
 Reddy, Prabhakara K.
 Robbins, Mark
 Robert, Jon M.
 Roda, Ferdinand T.
 Rogers, Marc
 Rosenzweig, Joseph L.
 Russell, Mark
 Sanders, Hallman E.
 Seifert, Kenneth A.
 Sharma, Bimlendra
 Shelby, Eugene M.
 Shroff, Rajesh K.
 Simpson, John B.
 Slaton, G. Don
 Sloand, Timothy Peter
 Smith, Bruce L. Jr.
 Smith, John W.
 Smith, Phillip L.
 Sorenson, Marney K.
 Sorrels, John W.
 Sousan, Leo
 Springer, Melvin R. Jr.
 Springer, William Y.
 St. John, Melody
 Stecker, Elton H. Jr.
 Stecker, Rheeta M.
 Stough, D. Bluford III
 Stough, Dow B. IV
 Tangunan, Priscilla L.
 Tapley, David R.
 Thomas, W. Al
 Thompson, Thomas P. Jr.
 Tucker, R. Paul
 Vallery, Samuel W.
 Vogel, Eric D.
 Wallace, Thomas "Tom"
 Walley, Luther R.
 Warren, E. Taliaferro
 Warren, William Jr.
 Watermann, Eugene
 Waters, Samuel
 Webb, Timothy
 Woodward, Philip A.
 Wright, Charles C.
 Young, Michael J.

Grant County

Heise, Brian A.
 Highsmith, William A.
 Irvin, Jack M.
 Paulk, Clyde D.
 Winston, Scott D.

Greene-Clay County

Baker, Clark M.
 Blair, Donald Waring
 Boggs, Dwight F.
 Bonner, J. Darrell
 Brown, Howard Stanton
 Bulkley, William J.
 Burchfield, Samuel S.
 Cagle, Roger E.
 Collier, Jon D.
 Crow, Asa A.
 D'Anna, Richard E.
 Duckworth, Hillard R.
 Fonticiella, Adalberto
 Hardcastle, R. Lowell
 Hazzard, Marion P.
 Hendrix, Barry
 Hendrix, Lisa
 Hobby, George A.
 Ilyas, Mohammad
 Jackson, Ron
 Kemp, Clarence
 Laffoon, Scott L.
 Lawson, J. Larry
 Martin, Richard O.
 Mitchell, Bennie E.
 Morrison, Jimmy J.
 Muse, Jerry L.
 Nissenbaum, Eliot M.
 Page, Billie C.
 Perry, Evelyn S.
 Perry, John K.
 Purcell, Donald I.
 Shedd, Leonus L.
 Sheridan, James G.
 Shotts, C. Mack Jr.
 Shotts, Vern Ann
 Smith, Norman E.
 Tamayo, Andres Joaquin
 Watson, Samuel D.
 White, Robert B.
 Williams, Dwight M.
 Williams, Jacob M.
 Yamada, Ronald R.

Hempstead County

Downs, Michael
 Finley, George
 Harris, Lowell O.
 Holt, Forney G.
 McKenzie, Jim
 Perez, Eduardo M.
 Portis, Richard P.
 Stevens, David G.
 Williams, Carl L.
 Wright, George H. #

Hot Spring County

Berry, Frederick B.
 Bollen, A. Ray

Brashears, Larry B.
 Burton, Bruce K.
 Cobb, Russell W.
 Ellis, C. Randolph
 Highsmith, Vivian F.
 Kersh, N. B.
 Lumb, John C.
 Peters, Claude F. #
 Purifoy, Shawn
 Tilley, Absalom
 Vaughan, John A.
 White, Bruce A.
 White, Robert H.

Howard-Pike County

Chuadry, Zafar A.
 Dunn, Robert
 Floyd, Mark A.
 Gullett, A. Dale
 Humphreys, T. J. Jr.
 King, Joe D.
 Martinazzo-Dunn, Anna
 Patel, Madanmohan
 Peebles, Samuel W.
 Sayre, John
 Sykes, Robert
 Turbeville, James O.
 Verser, Michael
 Ward, Hiram T.
 White, Phillip L.

Independence County

Alexander, William Steve
 Allen, James D.
 Angel, Jeff D.
 Baker, J.R.
 Baker, Robert V.
 Bates, Ronald J.
 Beck, James F.
 Bess, Lloyd G.
 Brown, Hunter Lee
 Brown, Verona T.
 Cummins, Thomas
 Davidson, Andy
 Davidson, Dennis O.
 Goodin, William H. Jr.
 Hatfield, Patrick M.
 Hays, Sarah F.
 Jeffrey, Jay R.
 Johnson, Deborah A.
 Jones, Edward J.
 Jones, Edward T.
 Joseph, Aubrey S.
 Ketz, Wesley J.
 Lambert, John S.
 Lowery, Ronald
 Lytle, Jim E.
 McClain, Charles M. Jr.
 Melton, Clinton G.
 Montgomery, F. Renee'

Moody, Lackey G.
 Moody, Melody
 Neaville, Gregory
 O'Brien, Marcus D.
 Piediscalzi, Nicholas
 Scott, John G.
 Simpson, Ronald
 Slaughter, Bob L.
 Sloan, Fredric J. II
 Smith, Charles
 Sutterfield, Terry F.
 Taylor, Chaney W.
 Taylor, Charles A.
 Van Grouw, Richard
 Waldrip, William J. III
 Walton, Robert B.
 Webster, Russell P.
 Williams, Robin C.

Jackson County

Ashley, John D. Jr.
 Chauhan, Mufiz A.
 Dudley, Guilford M. III
 Falwell, K. Wade
 Frankum, Jerry M. Jr.
 Fremming, Bret G.
 Green, Roger L.
 Hergenroeder, Paul J.
 Hunt, Randall Evan
 Jackson, Jabez Fenton Jr.
 Junkin, A. Bruce
 Kiss, Andrea T.
 Lumsden, Robert M.
 Molnar, Istvan
 Poon, Hon K.
 Reynolds, Roland C.
 Snodgrass, Phillip A.
 Young, Jack S. III

Jefferson County

Alexander, Lester T.
 Ancalmo, Nelson
 Anderson, Charles W.
 Armstrong, Simmie Jr.
 Atiq, Omar T.
 Atkinson, Robbie
 Atnip, Gwyn
 Attwood, H. M.
 Bell, Carl H. Jr.
 Bigongiari, Lawrence R.
 Bitzer, Lon
 Blackwell, Banks
 Bracy, Calvin M.
 Brooks, R. Teryl Jr.
 Broughton, Stephen A.
 Buckley, J. Wayne
 Busby, John
 Butler, Robert C.
 Campbell, James C. Jr.
 Carlton, Irvin L.

Carreon, Maria Jocelyn
 Cash, J. Steven
 Clark, Charles A.
 Coutts, William II
 Crenshaw, John
 Davis, Charles M.
 Davis, Paul W.
 Dedman, John D.
 Deneke, William
 Dharamsey, Shabbir A.
 Driskill, Angela
 Duckworth, Thomas S.
 Dunaway, Joseph D.
 Fendley, Ann E.
 Fendley, Claude E.
 Fendley, Herbert F.
 Flowers, Martha A.
 Forestiere, Lee A.
 Frigon, Jacquelyn S.
 Gardner, Dan R.
 Garner, Kimberly
 Green, Horace L.
 Gullett, Robert R. Jr.
 Harvey, Jerry L.
 Holaday, Lisa M.
 Hughes, L. Milton
 Hussain, Shafqat
 Hutchison, E. L.
 Hyman, Carl E.
 Irwin, Raymond A. Jr.
 Jacks, David C.
 Jacks, Dennis
 James, William J.
 Jenkins, Bobby
 Jenkins, Mary Ellen
 Jones, James III
 Jurkovich, David F.
 Justiss, Richard D.
 King, Yum Y.
 Kremp, Richard E.
 Langston, Lloyd G.
 Ligon, Ralph E.
 Lim, William N.
 Lindsey, James A.
 Lum, Don
 Lupo, David A.
 Lytle, John O.
 Mabry, Charles D.
 Malik, Shamim A.
 Marcus, Herschel
 Masood, Syed Kamil
 McDonald, Robert L.
 McFarland, Mike S.
 Meredith, William R.
 Miller, Donald L.
 Milligan, Monte C.
 Mohiuddin, Mohammed J.
 Mohyuddin, Adil Ibrahim
 Morris, Gerald C.
 Mulingtapang, Reynaldo F.

Newan, Michael
 Nixon, David T.
 Nixon, William R.
 Nuckolls, J. William
 Pearce, Malcolm B.
 Pierce, J. R. Jr.
 Pierce, Reid
 Pierce, Ruston Y.
 Pollard, J. Alan
 Quimosing, Estelita M.
 Redman, Anna T.
 Reid, Lloyene B.
 Roaf, Sterling A.
 Roberson, George V. Jr.
 Robinson, Paul F.
 Rogers, Henry L.
 Rook, Michael J.
 Ross, Robert L.
 Rowe, David E.
 Samuel, Ferdinand K.
 Shorts, Stephen D.
 Simmons, Calvin R.
 Simpson, P. B. Jr.
 Smith, Paul L.
 Stark, James
 Stern, Howard S.
 Sullenberger, A. G.
 Tejada, Ruben
 Townsend, Thomas E.
 Tracy, C. Clyde
 Trice, James
 Ulep, Benjamin T.
 Walajahi, Fawad H.
 Washington, Erma
 Wilkins, Walter J. Jr.
 Wineland, Herbert L.
 Worrell, Aubrey M. Jr.
 Wright, Steven H.

Johnson County

Goodman, James David
 Kuykendall, Scott
 McKelvey, Richard
 Pennington, Donald H.
 Shrigley, Guy P.

Lafayette County

Harbin, Bradley
 Lee, Willie J.

Lawrence County

Hughes, Joe E.
 Joseph, Ralph F.
 Lancaster, Shawn
 Lancaster, Ted S.
 Quevillon, Robert D.
 Spades, Sebastian A. III

Lee County

Balke, Susan W.

Gray, Dwight W.
 Ly, Duong N.
 Waddy, Leon Jr.

Little River County

Covert, George K.
 Kile, H. Lawson Jr.
 Kleinschmidt, Kevin C.
 Peacock, Norman W. Jr.
 Vorhease, James W.

Logan County

Ahmed, Sahibzada
 Alexander, Eugene
 Borklund, Maurice K.
 Buckley, Douglas A.
 Daniel, William R.
 Enns, Wayne P.
 Harbison, James D.
 Hasan, Shahzad
 Suguitan, Demetrio B. Jr.

Lonoke County

Abrams, Joe A.
 Anderson, Leslie
 Braswell, Thomas
 Holmes, Byron E.
 Inman, Fred C. Jr.
 Luker, Jerome H.
 Mann, R. Jerry
 Rochelle, Joe
 Schumann, Gerald M.
 Shurley, Floyd Jr.
 Thomason, Steven L.
 Valley, Marc A.
 Wilcox, Linda G.

Miller County

Alkire, Carey
 Andrews, A. E. Jr.
 Barnes, Walter C. Jr.
 Blankenship, D. Michael
 Burns, Billy R.
 Campanini, D. Scott
 Carlisle, David L.
 DeHaan, Jeffrey T.
 Dildy, Edwin V. Jr.
 Ditsch, Craig E.
 Dodd, N. Leland
 Dodge, John M.
 Duncan, Donald L.
 Eichler, Edward A. Jr.
 Ford, John Suffern
 Franks, Hayden
 Gabbie, Mark
 Gillean, John A.
 Gocio, John C.
 Graham, John
 Green, R. Clark
 Greenspan, Joseph

Griffin, Nancy
Hall, Eric E.
Hillis, Thomas M.
Hollingsworth, Charles E. II
Hughes, A. Keith
Jean, Alan B.
Jones, John W.
Joyce, F. E.
Kittrell, James
Knowles, Stanley C.
Loe, Arlis W.
McGinnis, Robert S. Sr.
Melton, Charles L.
Morris, Howard
Norris, John A.
O'Banion, Dennis
Peebles, Larry M.
Robbins, Joseph
Robertson, William J.
Robinson, Dianna L.
Rountree, Glen A.
Royal, Jack L.
Sarna, Paul D.
Sarrett, James
Schmidt, Howard
Schwedock, Nicholas
Shipp, G. Carl
Smith, Arnett D. Jr.
Smith, Christopher T.
Smolarz, Gregory J.
Solomon, J. Alan
Somerville, Patrick J.
Spence, Shanna
Stringfellow, Jerry B.
Stussy, Shawn
Tompkins, William Jr.
Tyler, Richard L.
Vereen, Lowell E.
Wade, Billy
Wilhelm, Frieda
Wren, Herbert B.
Wright, Nathan L.
Yarbrough, Charles P.
Young, Mitchell

Mississippi County

Abraham, Anes Wiley
Abramson, Lawrence
Bell, Mary C.
Biggerstaff, Jerry
Brock, Charles C. Jr.
Cullom, Sumner R.
Fairley, Eldon
Fergus, R. Scott
Grissom, David B.
Hall, Leslie
Hester, Karen Calaway
Hester, Richard
Hubener, Louis F.
Hudson, James H.

Husted, G. Scott
Jacob, Salil George
Jones, Herbert
Jones, Joe V.
Lin, Ching-Shan
LoCascio, Paul A.
Marcus, Trent Wright
Osborne, Merrill J.
Pollock, George D.
Rhodes, Joseph
Rodman, T. N.
Russell, James D.
Shahriari, Sia
Shaneyfelt, E. A.
Smith, Ronald D.
White, John Stephen
Williams, John S.

Monroe County

Campos, Amador
Collins, Linda
David, Neylon C. Jr.
Pham, Dac Tat
Pupsta, Benedict F.
Stone, Herd E. Jr.
Walker, Walter L.

Nevada County

Fox, Thomas

Ouachita County

Abbott, Judy
Braden, Lawrence F.
Brunson, Milton
Crump, Mark R.
Daniel, William A.
Dedman, William D.
Feld, Sheldon M.
Floss, Robert
Fohn, Charles H.
Guthrie, James
Hout, Judson N.
Jameson, John B. Jr.
Kelly, Patricia
Kendall, Jerry R.
Martin, Dan
McFarland, Gale
Miller, John H. #
Mosley, David
Nunnally, Robert H.
Ozment, L. V.
Sanders, Cal R.
Shrestha, Bal Narayan
Thorne, Arthur E.

Phillips County

Athota, Prasad J.
Barrow, John H. Jr.
Bell, L. J. Patrick
Bell, L. J. Patrick II

Berger, Alfred A.
Epstein, S. Mitchell
Faulkner, Henry N.
Frederick, William Ronald
Hall, Scott
McCarty, Charles P.
McCarty, Gordon E. Jr.
McDaniel, Marion A.
Miller, Robert D. Jr.
Paine, William T.
Patton, Francis M.
Rangaswami, Bharathi
Rangaswami, Narayanaswami
Tukivakala, P. Reddy
Vasudevan, Kanaka
Vasudevan, P.
Webber, David L.
Winston, William II
Wise, James E. Jr.

Polk County

Beckel, Ron Jr.
Cappello, Nicholas A.
Finck, John Henry
Fried, David D.
Lochala, Richard
McClard, Helen
Mesko, John D.
Perry, Karen A.
Sosa, Humberto J.
Tinnesz, Thomas
Wilson, Timothy
Wood, John P.

Pope County

Ashcraft, Ted
Austin, Nathan
Bachman, David S.
Barron, William G.
Barton, A. Dale
Battles, Larry D.
Beavers, H. Kevin
Bell, Michael
Bell, Robert A.
Berner, Dennis W.
Birum, Patricia J.
Bradley, Stanley C.
Brown, Charles H.
Brown, William Bruce
Burgess, James G.
Callaway, Jody C.
Carter, James M.
Cloud, Joe A.
Coombe-Moore, Jackie
Crouch, James Jr.
Crumpler, Joe B. Jr.
Cunningham, James A.
Dunn, Donald L.
Ewing, Donald C.
Ezell, Gerry D.

Ferris, Craig A.
Frais, Michael A.
Galloway, William W.
Gately, Stanley
Haines, Lynn
Hale, Jeffrey
Harden, V. Anthony
Harrison, Rick
Helms, William
Henderson, Vickie L.
Hendren, Mike
Hill, Donald F.
Hines, Cynthia C.
Honghiran, Ted
Hubach, Cindy
Kerin, Douglas
Khan, Gul Rukh
Khan, Muhammad A.
Killingsworth, Stephen M.
King, John W.
King, W. Ernest Jr.
Kolb, James M. Jr.
Kriesel, Ben J.
Lawrence, Frank M.
Lovell, Richard K. Sr.
Lowrey, Douglas H.
Lowther, Laura Marie
Massey, V. Rudolph
Mauch, E. Jane
May, Robert H. Jr.
McCraw, Barry W.
Meyer, Kelly H.
Miller, Mark E.
Monfee, Andrew M.
Murphy, David S.
Myers, J. Mark
New, Kenneth O.
Pilkington, Neylon S.
Price, Larry
Richison, George C.
Riddell, C. Michael
Riley, Don C.
Robertson, William T.
Soto, Sergio F.
Stolz, Gerald A. Jr.
Tapley, Thomas S.
Teeter, Stanley D.
Thurlby, W. Robert
Turner, Finley P. II
Turner, Kenneth B.
West, Boyce W.
White, Ronald
Wilkins, Charles F. Jr.
Williams, David M.
Williams, Thomas C.
Young, Sandra S.

Pulaski County

Abel, Lee C.
Abraham, Dana C.

Abraham, James H.	Bell, Rex H.	Burnett, P. Susan	Cornell, Paul J.
Abraham, James H. III	Bennett, F. Anthony Jr.	Burrow, Dennis R.	Courtney, Willis Jr.
Ackerman, William E. III	Benton, William	Byrum, Jerry	Coussens, David M.
Adametz, James	Berry, Robert L.	Cain, Thomas	Covey, M. Carl Jr.
Adametz, John Sr.	Bevans, David W. Jr.	Calcote, Robert A.	Crawford, Cary M.
Adametz, Kimberly	Bienvenu, Gregory	Calderon, Vincent Jr.	Crews, J. Travis
Adams, Christopher	Bienvenu, Harold G. III.	Caldwell, Charles R.	Crocker, Charles H.
Adamson, James	Bierle, Michael	Calhoon, J. Dale	Cross, J. B.
Alexander, Albert S.	Billie, James	Calhoun, David L.	Crow, Joe W.
Alford, T. Dale	Biondo, Raymond V.	Calhoun, Joseph D.	Crow, R. Lewis Jr.
Allen, Durward Jr.	Birkett, Ian McRae	Calhoun, Richard A.	Darwin, William G.
Allen, John E. Jr.	Bishop, William B.	Campbell, Gilbert S.	Daugherty, Joe D.
Alston, Phillip	Biton, Victor	Campbell, James W.	Daugherty, John L.
Amir, Jacob	Blackshear, Jack L. Jr.	Caplinger, Kelsy J. III	David, Alex
Aquino, Al	Blankenship, William F.	Carfagno, Jeffrey	Davie, Melanie
Araoz, Carlos	Blasier, R. Dale	Carle, Scott W.	Davila, David G.
Archer, Robert L.	Boehm, Timothy	Carson, Layne E.	Davis, Glenn R.
Arrington, Robert	Boellner, Samuel W.	Carter, Jerry L.	Davis, J. Lynn
Atha, Timothy C.	Boger, James E.	Carttar, Charles	Davis, Scott A.
Baber, John C.	Boop, Frederick	Caruthers, Carol	Day, James A.
Baber, John T.	Boop, Warren C. Jr.	Caruthers, Samuel B. Jr.	De Bruyn, Van H.
Backus, Joe T.	Bornhofen, John H.	Casali, Robert E.	Dean, David M.
Bailey, H. A. Ted Jr.	Bost, Roger B.	Cash, Darlene	Dean, David P.
Baker, Glen F.	Bourne, David E.	Casper, Robert B.	Dean, Gilbert O.
Baker, John W.	Bowen, W. Scott	Casteel, Helen	Deaton, C. William Jr.
Baker, Johnson	Bower, Charles M.	Cate, Chris M.	Deed, Ashley
Baldwin, Maxwell R.	Boyd, Charles M.	Cathey, Janet	Deer, Philip J. Jr.
Baldwin, Shelly	Bradburn, Curry B. Jr.	Cathey, Steven	Deer, Philip James III
Ball, Charles W. Jr.	Bradford, J. David	Chai, Sandra	Dennis, James L.
Baltz, Brad Patrick	Bradley, Joe F.	Chakales, Harold H.	DesLauriers, S. Killeen
Barber, Jeffrey	Brainard, Jay O.	Chandler, Billy M.	Dhaliwal, Harminder Singh
Barber, Laurie	Bratton, Nita	Chandler, Kay H.	Dickins, John R. E.
Barclay, David	Bressinck, Renie E.	Chappell, Carol W.	Dickins, Robert D. Jr.
Bard, David S.	Brewer, Robert	Cheairs, David B.	Dillard, Daniel C.
Barger, Denver L.	Brewer, Thomas E.	Cheairs, John T.	Diner, Bradley
Barlow, Brian E.	Brimberry, Ronald K.	Chisholm, Dan P.	Dixon, Keith A.
Barnes, C. Lowry	Brineman, John	Choate, Robert B.	Dodd, Doyne
Barnes, Reginald	Brinkley, Roy A.	Christian, John D.	Doncer, Richard P.
Barnes, Robert W.	Brizzolara, A. J.	Christy, George W.	Doucet, Marlon J.
Barnett, David	Brizzolara, John Paul	Chudy, Amail	Douglas, Warren M.
Barnett, Troy F.	Broach, R. Fred	Church, Marion M.	Downs, Ralph A.
Barron, Edwin N. Jr.	Broadwater, John Ralph Jr.	Church, Michael	Dungan, William T.
Barrow, Robert	Brown, Michael	Clark, J. Roger #	Dwyer, Gregory A.
Bartnicke, Benjamin J.	Brown, Pamela S.	Clark, Richard B.	Eans, Thomas L.
Barton, Gary	Brown, Randel	Clift, Steven A.	Easter, Rex M.
Baskin, Barry	Brown, Steven L.	Clifton, Cliff	Edmiston, Frank G.
Bates, Ramona L.	Browning, Donald G.	Clinton, Kimberly S.	Eisenach, R. Jeffrey
Bates, Stephen	Browning, Stanley K.	Clogston, Charles W.	English, Jim
Bauer, David	Bruce, Thomas A.	Cobb, Jock S.	Evans, Billy
Bauer, F. Michael	Bryan, James W. IV	Cockrill, H. Howard Jr.	Evans, Samuel C.
Bauer, Frank M. Jr.	Buchanan, Francis R.	Cogburn, Bob E.	Farmer, Joseph F.
Bauman, David C.	Buchanan, Gilbert A.	Colclasure, Joe B.	Farque, Greg L.
Bayliss, John M.	Buchman, Joseph A. #	Collins, David	Fawcett, Deborah Dee
Beadle, Beverly	Buchman, Joseph K.	Collins, Gary James	Fernandez, Agustin
Bearden, James R.	Bucolo, Anthony P.	Collins, Kevin J.	Ferris, Ernest J.
Beaton, J. Neal	Buford, Joe L.	Cone, John	Fewell, Ronald D.
Beau, Scott	Burba, Alonzo R.	Cook, J. Mitchell	Fielder, Charles R.
Beck, Joseph II	Burger, Robert A.	Cook, Timothy R.	Finan, Barre F.
Becquet, Norbert J.	Burks, Karen	Cope, Michael	Fincher, Robert L.
Belknap, Melvin L.	Burnett, Hugh F.	Corbitt, Mary	Fiser, Martin

Fiser, Robert H. Jr.	Hall, R. Whit	Hoffmann, Thomas H.	King, Michael T.
Fiser, William P. Jr.	Hamilton, George Jr.	Holland, Jay D.	King, W. David
Fitzgerald, Charles	Hampton, John R. III	Holloway, J. Douglas	Kittler, Fred J.
Fitzhugh, A. Stuart	Hankins, Edwin III	Holt, Stephen	Kizziar, Jim C.
Flaming, Jay	Hanna, Ehab	Holton, Jerry C.	Klimberg, V. Suzanne
Fletcher, Anthony	Harber, Harley	Hopkins, Karmen	Knott, Patricia A.
Fletcher, Thomas M.	Hardberger, R. E.	Hough, Aubrey J. Jr.	Knox, Michael F.
Florez, James P.	Hardin, Robert	Houk, Richard	Kolb, Agnes J.
Floyd, Bill G.	Hardin, Ronald D.	Houston, Samuel	Koonce, Thomas W.
Ford, Barry G.	Harger, C. Harold	Howell, Coburn S. Jr.	Kovaleski, Thomas M.
Foster, Gil	Hargrove, Joe L.	Hudec, Regina	Kozlowski, Karen J.
Fraiser, Lacy P.	Harper, Gary E.	Hughes, Ronald D.	Krulin, Gregory S.
France, Gene L.	Harrendorf, Cagle	Hundley, Randal F.	Kulik, Steven A.
Fraser, Eric A.	Harrington, Gregory S.	Hurlbut, Kimberly	Kumpuris, Andrew G.
Fravel, Jonathan F.	Harrington, Mariann	Hutchins, Laura	Kumpuris, Dean
Frazier, Cynthia	Harris, Donald R.	Hutchins, Steven W.	Kumpuris, Frank G.
Frazier, G. Thomas	Harris, T. Stuart	Hutson, Harold G.	Kyle, Joan E.
Freeman, Diane	Harris, W. Turner	Ingram, Jim	Kyser, J. Floyd
Fuller, C. Dale	Harrison, A. Vale	Ironside, J. Brett	Laakman, Robert W.
Fuller, C. James III	Harrison, Roy E.	Jackson, J. Presley	Lambert, Robert A.
Fulmer, John M.	Harrison, William	Jackson, Thomas	Landers, James H.
Galbraith, Robert C.	Harshfield, David Lee Jr.	Jansen, G. Thomas	Lane, John W.
Gardner, Guy F.	Hart, Thomas M.	Johnson, Anthony D.	Lang, Nicholas P.
Garner, William L.	Harter, Scott	Johnson, B. Richard	Langford, Timothy
Garrett, Nina	Hatch, Allan B.	Johnson, Ben D.	Lehmberg, Robert W.
Gettys, Joseph M. Jr.	Hathcock, Stephen A.	Johnson, Carl	Leibovich, Marvin
Gibbs, Mark	Hauer-Jensen, Martin	Johnson, Clifton R.	Leithiser, Richard Jr.
Giblin, John M.	Hawley, Harold B. #	Johnson, Dianne Flowers	Leonard, Donald G.
Gibson, Gordon L.	Hayden, William F.	Johnson, M. Bruce	Leou, Frank J.
Giglia, Anthony R. III	Hayes, J. Harry Jr.	Johnson, Philip H.	Lewis, Derek
Giles, Wilbur M.	Hayes, Richard L.	Johnston, Dale E.	Lile, Henry A.
Gillespie, A. Tharp	Hayes, Sidney P.	Johnston, Kenneth	Lincoln, Ben M.
Gilliam, David	Haynes, W. Ducote	Jones, Gail Reede	Lipke, Jay M.
Gist, Charles C.	Headstream, James W.	Jones, Garry L.	Loebl, Edward C.
Glenn, Wayne B.	Heard, Adele	Jones, John C.	Logan, Charles W.
Glidden, Michael L.	Hearnsberger, H. Graves III	Jones, Kathleen C.	Love, Tommy L. Jr.
Glover, Lawson E. Jr.	Hearnsberger, Henry G. Jr.	Jones, Robert D.	Lowe, Betty A.
Glover, W. Clyde	Hearnsberger, John E.	Jones, Roy Steven	Ludwig, Frank R.
Golden, William E.	Hedges, Harold H.	Jones, S. Michael	Luttrell, Rex E.
Goldsmith, Geoffrey	Hefley, Bill F.	Jones, William N.	Lyons, Virgle E. Jr.
Gosser, Bob L.	Hefley, William Jr.	Jordan, F. Richard	Mabrey, William
Goza, Gary R.	Henker, Fred O. III	Jordan, Randy A.	Magie, Stephen K.
Goza, George M. Jr.	Henry, C. Reid Jr.	Joseph, Ralph F. II	Mallory, John A.
Grant, Karen G.	Henry, Charles R. Sr. #	Joseph, William Frank	Maloney, F. Patrick
Green, Benny J.	Henry, D. Andrew	Jouett, W. Ray	Maners, Ann
Greenway, C. Don	Henry, G. Michael	Joyce, John W.	Marable, Charles T.
Greenwood, Denise R.	Henry, G. Morrison	Junkin, Ruth H.	Markland, Gary S.
Greer, G. Stephen	Henry, J. Charles	Kaemmerling, Raymond E.	Marks, Stephen R.
Greutter, John E. Jr.	Henry, J. Forrest Jr.	Kahn, Alfred Jr.	Martin, Kenneth A.
Griebel, Jack A. Jr.	Henry, Richard Y.	Kane, James J.	Marvin, Peter
Grimes, H. Austin	Henry, William T.	Keeran, Michael G.	Mason, J. Zachary
Guard, Peggy K.	Henson, Gregory N.	Keith, Sharon C.	Mason, William L.
Guggenheim, Frederick G.	Herbert, R. Wayne	Kellar, Stanley L.	Massey, Deborah A.
Guin, Jere D.	Herron, Jerry M.	Keller, Alfred W.	Matthews, Joseph W.
Hagans, James III	Hickey, Joseph P.	Kennedy, Eleanor E.	McAdoo, Hosea W. Jr.
Hagler, James L.	Hicks, David C.	Kennedy, H. Frazier	McCarthy, Richard E.
Hahn, Herbert	Hicks, David L.	Kennedy, Robert	McConnell, John D.
Hall, A. D.	Hixson, Marcia Lynn	Ketcham, Jeffrey	McCoy, Julia M.
Hall, A. David	Hodges, J. Timothy	Key, J. Michael	McCracken, Gail Ann
Hall, Gregory S.	Hodges, Steven C.	Kilgore, Reed W.	McCracken, John

McCrary, George A.	Newsum, Jon Kirby	Raque, Carl J.	Silzer, Robert R.
McCutcheon, Frank B. Jr.	Newton, Fred E.	Ray, V. Gail	Simmons, Orman W.
McDonald, James E.	Nguyen, Duong	Rector, Nancy F.	Simpson, Steve
McDonald, Judy	Nichols, Sandra D.	Redding, Allen H.	Sims, James M.
McGhee, Michael A.	Nix, Richard A.	Reding, David L.	Singer, Peter
McGowan, Robert Jr.	Nokes, Steven	Redman, John F.	Singleton, L. Gene
McGrew, Robert N.	Norton, George A.	Reed, Ewing C. Jr.	Sinor Kennedy, Elicia
McKelvey, K. David	Norton, Joseph A.	Reese, William G.	Sipes, Frank M.
McKinney, Carl	Nowlin, James Bill	Reid, Gene W.	Skokos, C. Kemp
McKinnon, L. Jane	Nugent, Richard	Rommel, Raymond	Slater, John G. Jr.
McKnight, C. Allen	Oates, Gordon P.	Rice, Robert L.	Slaven, John E.
McLeane, Mark	Oddson, Terrence A.	Riddle, John F. Jr.	Slayden, John E.
McMillin, F. Lamar Sr. #	Oglesby, Walter R.	Riley, William H.	Sloan, Eugene E.
McNair, James R.	Osam, Patrick N.	Ritchie, Robert Ross	Sloan, Fay M.
McNee, Valerie	Osteen, Paul	Robbins, Kenneth	Smart, Douglas F.
Meacham, Donald F.	Overacre, Robert	Roberson, Michael C.	Smelz, Johnny
Meador, Annette Parker	Owen, Richard Jr.	Roberts, Kevin	Smith, Aubrey C.
Meadors, Frederick	Owings, Richard	Robinson, Matthew	Smith, Charles W.
Meadors, John	Padberg, Frank T.	Rodgers, C. Dudley	Smith, David E.
Medlock, Rickey D.	Paddock, George	Rodgers, Charles H.	Smith, Douglas B.
Mego, David Michael	Padilla, Fernando	Rooney, Thomas P.	Smith, G. Richard Jr.
Mellor, Roy II	Pappas, James J.	Rosenbaum, Carl A.	Smith, J. Tom
Mendelsohn, Lawrence A.	Parham, David M.	Ross, Ashley Sloan	Smith, James L.
Metrailler, James A.	Parker, J. Mayne	Ross, Cynthia	Smith, Purcell Jr.
Meziere, Tom	Parkhurst, James	Ross, Robin	Smith, Thomas J.
Miles, David A.	Parmley, Tim	Ross, S. William	Smith, Thomas W.
Miller, Forrest B. Jr.	Parnell, Clifton L. III	Rounsaville, Harry L.	Smith, Vestal B. Jr.
Miller, Raymond P. Sr.	Pastor, Randy	Ruddell, Deanna N.	Snyder, Victor F.
Milner, E. L.	Paulus, Thomas E.	Ruggles, Dwayne L.	Somers, A. Jack
Mitchell, George K.	Pearce, Charles E.	Russell, Anthony E.	Sorrells, R. Barry
Mizell, Philip	Peek, Richard	Russell, James B.	Sotomora, Ricardo F.
Mizell, Walter S.	Peeples, R. Earl	Ryals, Rickey O.	Squire, Arthur E. Jr.
Moffett, T. Robert Jr.	Peters, John E.	Saer, Edward H. III	St Amour, Thomas E.
Money, Wandal D.	Peters, Phillip J.	Safman, Bruce L.	Stallings, James Walt
Montanez, Josue	Petrus, Gary M.	Sanders, Kelli Keene	Stanley, Joe P.
Mooney, Donald K.	Petursson, Gissur J.	Santoro, Ian H.	Stanley, Robert
Moore, Burton A.	Pevahouse, Joe	Satre, Richard W.	Stephens, Wanda
Moore, J. Malcolm Jr.	Phillips, Charles E.	Schlesinger, Scott Michael	Stern, Scott J.
Moore, Michael	Phillips, Hannah	Schock, Charles C.	Sternberg, Jack J.
Moore, Rex N.	Pierce, William	Schratz, Bruce E.	Stewart, Daryl
Moore, Robert B.	Pike, John D.	Schroeder, George T.	Stewart, Marguerite R.
Moore, Thomas C.	Pledger, Norman R.	Schultz, John C.	Stinnett, Thomas
Morris, Barbara	Pollard, Arlee E.	Schwander, L. Howard	Stokes, B. Douglas
Morris, W. Dale	Pollock, Michael Marion	Schwankhaus, John D.	Storeygard, Alan R.
Morrison, Debra F.	Pope, David	Scott, Don I.	Stotts, John R.
Morse, James C.	Pope, Norton A.	Scott, Jane F.	Strauss, Mark A.
Morton, William J.	Porter, Maria Cora	Scruggs, Jan W.	Strode, Steven W.
Mulhollan, James S.	Porter, Robert Jr.	Searcy, Robert M.	Stroope, George F.
Murphy, Bruce	Potts, Jerry L.	Seguin-Calderon, Rosa Elia	Studdard, James D.
Murphy, James E. Jr.	Power, Robert C.	Seibert, Joanna J.	Sturdivant, Stephen
Murphy, Jeanne	Prather, Jerry L.	Seibert, Robert	Suen, James
Murphy, Randolph	Price, John G.	Selakovich, Walter G.	Sulieman, J. Samir
Murphy, Robert	Primack, Daren S.	Sessions, Louis II	Sullivan, Charles D.
Murphy, Tena	Pringos, Andrew A.	Shewmake, Kristopher B.	Sullivan, Jan R.
Nagel, Fred G.	Pruitt, Tad	Shields, Eddie	Sundermann, Richard H.
Nash, John C.	Pyle, Hoyte R. Jr.	Shock, John P.	Talbert, Gary Eugene
Nelson, Alvah J. III	Quinn, Brian D.	Short, Harold K.	Talbert, Michael L.
Nelson, Carl L.	Quirk, J. Gerald	Shotts, Joseph	Tamas, David E.
Nestrud, Richard M.	Ransom, John M.	Shuffield, James	Tanner, James A.
Newbern, D. Gordon	Rapp, Richard J.	Silvoso, Gerald R.	Taylor, David R.

Taylor, Eugene H.
 Taylor, Ken M.
 Tedford, John G.
 Tharp, John G.
 Thomas, A. Henry
 Thomas, Peter O.
 Thompson, S. Berry Jr.
 Thorn, G. Max
 Thrower, Rufus
 Tilley, Steve
 Tolleson, Claudia
 Towbin, Eugene J.
 Tracy, Phillip A.
 Trantum, Bill L.
 Trigg, Laura
 Tseng, Jyi-Ming
 Tucker, R. Stephen
 Tucker, W. Everett
 Valentine, Robert G. Jr.
 Van Zandt, Janelle
 Vaughter, W. Roger
 Velez, L. Duane
 Vinsant, Kurtis
 Vogel, Robert G.
 Wade, William I. Jr.
 Wagoner, Jack
 Walker, Lee
 Walker, Ronald
 Walt, James R.
 Waner, Milton
 Ward, Harry P.
 Ward, Joseph P.
 Ward, Thomas
 Waterhouse, Michael H.
 Watkins, Charles J.
 Watkins, John Jr.
 Watkins, John G. III
 Watkins, Julia
 Watkins, Larry S.
 Watson, Charles
 Watson, Daniel W.
 Watson, Vye B.
 Weber, Edward R.
 Weber, James R. #
 Weber, Michael
 Weiss, David W.
 Weiss, Gerald N.
 Welch, Samuel Bradley
 Wellons, James A. Jr.
 Wende, Raymond A.
 Wenger, Carl E.
 Westbrook, Kent C.
 Westbrook, September
 Westerfield, Frank M. Jr.
 Westerfield, Robert
 White, Oba B. #
 Wilkes, Elbert H.
 Wilkes, T. David I.
 Williams, Alonzo D.
 Williams, C. David

Williams, G. Doyne Jr.
 Williams, Paul E.
 Williams, Ronald N.
 Williamson, Adrian III
 Wills, Pamela
 Wilson, Elaine
 Wilson, Frances C.
 Wilson, Frank J. Jr.
 Wilson, I. Dodd
 Wilson, James Michael
 Wilson, James W.
 Wilson, John L.
 Wilson, R. Sloan
 Wolverton, John
 Workman, W. Wayne
 Worley, Linda
 Wortham, Thomas H.
 Wyatt, Richard A.
 Wylie, Paul
 Yamauchi, Terry
 Yeager-Bock, Angy
 Yee, Suzanne
 Yocum, John
 Young, Douglas E.
 Young, Evelyn
 Yousuff, Sarah S.
 Zelnick, Paul
 Ziller, Stephen A. III
 Ziomek, Stanley

Randolph County

Baltz, Albert L.
 Barre, Hal S.
 DeClerk, Thomas
 Felt, Gerald C.
 Guntharp, George
 Holt, Danny B.
 Jansen, Andrew J. III
 Loop, Paul J.
 O'Connor, Brendan
 Scott, William W. #
 Smith, Norman K.
 Troxel, Roger

Saline County

Albey, Mark
 Baber, Quin M.
 Baka, John V.
 Beard, Michael R.
 Bethel, James
 Boyle, Ronald H.
 Burton, Charles R.
 Caldwell, David L.
 Cartaya, Daniel Isidro
 Cash, Ralph D.
 Cathcart, Evelyn
 Chaffin, Raines
 Coker, S. Dale
 Cooper, James B.
 Council, Robert A. Jr.

Dockery, Melissa
 Duncan, J. Shelby
 Eaton, James M.
 Enderlin, Annette
 Higginbotham, Michael
 Hill, Edward B.
 Hill, Howell V.
 Hogue, F. Paul
 Kirk, Marvin N. Jr.
 Martindale, J. L.
 Martindale, Mark A.
 McGarry, Patricia G.
 Quade, Deborah
 Ramsay, Rex C. Jr.
 Schmidt, Michael J.
 Steele, William L.
 Sudderth, Brian F.
 Taggart, Sam D.
 Thibault, Frank G. Jr.
 Thomas, Bill R.
 Thorn, Harvey Bell Jr.
 Tilley, Roger L.
 Vice, Mark
 Viner, Donald L.
 Wagner, Taylor
 Watson, Kirk D.
 Wright, John D.

Sebastian County

Acklin, Jimmy D.
 Al-Ghussain, Emad A.M.M.
 Albers, David G.
 Alberty, Joe
 Anderson, Paul
 Armstrong, Sinclair Jr.
 Asbury, Dale W.
 Atkins, Jimmie G.
 Axelsen, Nils K.
 Bailey, Charles W.
 Baker, Max A.
 Balis, Luc G.
 Balsara, Zubin
 Barnes, L. Ford
 Barr, Marilyn
 Barry, James Jr.
 Barsik, Tamara
 Beachy, Allen L.
 Beene-Lowder, Hannah L.
 Berryhill, Richard E.
 Berumen, Mike
 Bise, Roger N.
 Bodiford, Gary L.
 Bordeaux, Ronald A.
 Bouton, Michael S.
 Bradford, A. C.
 Brown, Byron L.
 Brown, James A.
 Brown, Richard
 Buie, James H.
 Builteman, Cynthia

Builteman, James
 Burks, Deland
 Busby, J. David
 Cain, Martin
 Callaway, Michael
 Carson, Randall L.
 Cassady, Calvin R.
 Chalfant, Charles
 Chapman, Robert K.
 Chester, Robert L.
 Cheyne, Thomas
 Christopher-Harmon, Pamela
 Coffman, Edwin L.
 Coffman, John L.
 Coleman, Michael D.
 Craft, Charles
 Crow, Neil E. Jr.
 Culp, William C.
 Davenport, O. Leo
 Deaton, John M.
 Deneke, James S.
 Diment, David D.
 Dorzab, Joe H.
 Drolshagen, Leo F. III
 Dudding, William F.
 Eckes, Anne Michelle
 Edwards, Gary
 Ellis, Homer G.
 Ennen, Randy
 Feder, Frederick P. Jr.
 Feezell, Randall E.
 Feild, T. A. III
 Felker, Gary V.
 Ferrell, Jeffrey
 Fisher, Robert D.
 Flanagan, A. Dean
 Fleck, Randolph Peter
 Fleck, Rebecca
 Flippin, Tony A.
 Florian, Thomas
 Floyd, Charles H.
 Francis, Darryl R. II
 Gamble, Cory
 Gardner, Kenneth
 Gast, Kristie L.
 Gedosh, Edgar A.
 Gill, James A.
 Girkin, R. Gene
 Glover, D. Bruce
 Gold, Adam
 Goodman, R. Cole Jr.
 Goodman, Raymond C. Sr.
 Griggs, William L. III
 Gwartney, Michael P.
 Handley, David L.
 Handley, Melissa H.
 Hanley, Larry L.
 Haraway, Stuart D.
 Harrison, Lonnie Eugene
 Hathcock, Alfred B. #

Hendrickson, Jon
 Henry, James
 Herren, Adrian L.
 Hewett, Archie L.
 Hoffman, John D.
 Hoge, Marlin B.
 Holmes, Williams C. Jr.
 Hornberger, Evans Z. Jr.
 Howell, James T.
 Hughes, Robert P. Jr.
 Hunton, David W.
 Huskison, William T.
 Ibrahim, Manar S.A.
 Ihmeidan, Ismail H.
 Ingram, Ralph N.
 Irwin, Peter J.
 Jagers, Robert
 Janes, Robert H. Jr.
 Jefferson, Thomas C.
 Jones, Greg T.
 Kannout, Fareed
 Kareus, John L.
 Keating, Janice M.
 Kelly, James E. III
 Kelly, Thomas C.
 Kelsey, J. F.
 Keyashian, Mohsen
 Kientz, John Jr.
 Klopfenstein, Keith
 Knight, William E.
 Knox, Robert
 Kocher, David B.
 Koenig, Albert S. Jr.
 Kradel, R. Paul
 Kramer, Ralph G.
 Kutait, Kemal E.
 Kyle, W. Lamar
 Lambiotte, Louis O.
 Landherr, Edwin
 Landrum, Samuel E.
 Lane, Charles S. Jr.
 Lenington, Jerry O.
 Lewis, George L.
 Lilly, Ken E.
 Little, Charles
 Lockwood, Frank M.
 Long, James W.
 Loyd, Gregory M.
 MacDade, Albert D.
 Magness, Jack L. Jr.
 Manus, Stephen C.
 Marsh, Michael A.
 Martimbeau, Claude
 Martin, Art B.
 Martin, Rick
 Masri, Hassan M.
 Maxey, H. Craig
 McClain, Merle
 McClanahan, J. David
 McEwen, Stanley R.

McKinney, Robert #
 McMinimy, Donald
 Meade, Arturo E.
 Meador, Don M. #
 Mehl, John Kurt
 Miller, Robert C.
 Miller, Robert M.
 Mings, Harold H.
 Moore, Trudy J.
 Moore-Farrell, Laura
 Mosley, Myra C.
 Moulton, Everett C. Jr.
 Moulton, Everett C. III
 Mumme, Marvin E.
 Murray-Stephens, Andrea J.
 Muylaert, Michel
 Nassri, Louay K.
 Nelson, Steve B.
 Nichols, David R.
 Niemann, Jeffrey M.
 Nolewajka, Andre J.
 O'Bryan, Robert K.
 Olson, John D.
 Paris, Charles H.
 Parker, Joel E. Jr.
 Parker, Thomas G.
 Patrick, Donald L.
 Pearce, Larry W.
 Pence, Eldon D. Jr.
 Phillips, Don
 Phillips, Kevin Clark
 Phillips, Sumer
 Phillips, Tonya
 Pillstrom, Lawrence G.
 Poe, McDonald Jr.
 Poole, M. Louis
 Porter, Neill C.
 Post, James M.
 Prewitt, Taylor A.
 Price, Claire
 Price, Lawrence C.
 Rabideau, Dana P.
 Raby, Paul L.
 Raymond, Thomas H.
 Reese, Valerie
 Rivera, Ernesto
 Robinson, Ronald P.
 Rodgers, Brian H.
 Russell, Rex D.
 Sanders, Robert E.
 Sanders, Robert V. III.
 Saviers, Boyd M.
 Schemel, William H.
 Schkade, Paul A.
 Schroeder, Cygnet
 Schwarz, Julio
 Schwarz, Paul R.
 Seffense, Stephen J.
 Seiter, Kenneth
 Sherrill, William M. Jr.

Short, Bradley Mark
 Smith, Kent
 Smith, Terrald J.
 Snider, James R.
 Stanton, William B.
 Stewart, Jerry R.
 Stewart, John B.
 Still, Eugene F. II
 Stillwell, Mark
 Stites, Kirk D.
 Studt, James
 Swicegood, John R.
 Taft, Eileen
 Taft, Eric
 Teeter, Mark
 Thompson, J. Kenneth #
 Thompson, Robert J.
 Turner, William F.
 Van Asche, Christopher
 Vanderpool, Roy E.
 Vernon, Rowland P. Jr.
 Waack, Timothy
 Wallace, Kenneth K.
 Webb, William K.
 Weisse, John J.
 Wells, John D.
 Westbrook, Michael R.
 Westermann, Norman F.
 Whitaker, John
 Wikman, John H.
 Wills, Paul I.
 Wilson, Morton C.
 Wolfe, Michael S.
 Woods, Leon P.
 Zufari, Munir M.

Sevier County

Buffington, Mike
 Couture, Susan E.
 Gonzalez, Floyd
 Hoyt, Jonathan
 Jones, Charles N.
 Jones, Thomas
 Stearns, David E.
 Vogan, Cheryl L.

St. Francis County

Collins, E. Morgan Jr.
 Conner, George
 Fong, Fun Hung
 Guillermo, Enrique C.
 Hammons, Edward P.
 Hashmi, Shakeb
 Healy, Richard O.
 Kumar, Sudhir
 Lopez, Ramon E.
 Meredith, James Jr.
 Patton, W. Curtis
 Salvador, Ester Arejola
 Schwartz, Frank R.

Tri County

Arnold, Carl
 Arnold, Griffin II
 Bozeman, Jim G.
 Campos, Louis
 Grasse, A. Meryl
 Jackson, George W.
 Krygier, Albin J.
 Lane, Robert C.
 Moody, Michael N.
 Phillips, Rebecca
 Relyea, William V.
 Tatum, Harold M.
 Tucker, Charles L.
 Varela, Charles D.
 Wright, Donald

Union County

Anaya, Carlos
 Anzalone, Gary
 Arceneaux, Matt
 Barenberg, Andrew
 Bevill, Gary L.
 Booker, J. Gregory
 Bowman, Raymond N.
 Bryant, D'Orsay III
 Callaway, Matthew Dates
 Carroll, Peter J.
 Cyphers, Charles D.
 Daniels, C. Dwayne
 Davis, Richard K.
 Deere, Joy
 Dietzen, Richard E.
 Dixon, R. Mark
 Dougherty, Bert
 Duzan, Kenneth R.
 Elliott, Wayne G.
 Ellis, Jacob P.
 Ferreri, Roger Nicholas
 Fonticiella, Aldo V.
 Forward, Robert B.
 Fraser, David B.
 Germann, Robert E.
 Giller, W. John Jr.
 Gomez, Henry L.
 Harper, William L.
 Hill, Grady Jr.
 Hopson, Deanna
 Jenkins, Chester W.
 Jones, Steve A.
 Jucas, Diana T.
 Jucas, John J.
 Kang, Gurprem Singh
 King, Billy D.
 Kinslow, Ivory
 Landers, Gardner H.
 Marrero, Ralph J.
 Massanelli, Gregg L.

Menendez, Moises A.
 Murfee, Robert M.
 Ong, Tie S.
 Pillsbury, Richard C.
 Pirnique, Allan S.
 Ratcliff, John
 Ray, Robin Phinney
 Robertson, Donya
 Rogers, Henry B.
 Roper, Richard
 Sample, Dorothy C.
 Sarnicki, Joseph
 Schonefeld, Michael D.
 Schultz, Wayne H.
 Scurlock, William R.
 Seale, James E. Jr.
 Smith, George W.
 Sokolyk, Stephen M.
 Stevens, Willis M. Jr.
 Talley, H. Aubry
 Tolosa, Elizabeth
 Tommey, C. E.
 Tommey, Robert C.
 Turnbow, R. L.
 Ulmer, Minna I.
 Warren, George W.
 Watson, Robert A.
 Weedman, James B.
 Williamson, John R.
 Wilson, Larkin M. Jr.
 Winfrey, Cheryl D.
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 Zahniser, Donna J.

Van Buren County

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 Stames, Harry

Washington County

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 Applegate, C. Stanley Jr.
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 Beck, William A.
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 Coker, Tom Patrick
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 Councille, Clifford C. Jr.
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 Cunningham, Darrin D.
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 Davis, Randall
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 Dodson, C. Dwight
 Dorman, John W. #
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 Dykman, Thomas R.
 Eck, Gareth
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 Fink, Roger Lee II
 Fish, Ted J.
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 Garibaldi, Byron T.
 Garner, Hershel H.
 Ginger, John D.
 Gray, Dalton L. II
 Grear, Danna
 Green, Michael D.
 Grote, Walton
 Gyles, Nicholas R. II
 Haisten, James
 Hall, Ben
 Hall, Joe B.
 Hamilton, Herbert E.

Harris, David Jay
 Harris, Murray
 Harris, Paul L.
 Harris, W. Duke
 Harrison, William F.
 Hart, Hamilton R.
 Hayward, Malcolm L. Jr.
 Hedberg, Curtis
 Heinzelmann, Peter R.
 Hendrycy, Paul R.
 Henry, Morris M.
 Henry, Paul M.
 Higginbotham, Hugh B.
 Higginbotham, William
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 Hui, Anthony
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 Hutson, Sanford E. III
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 Kraichoke, Saran
 Landrum, Leslie G.
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 Mahan, Meredith
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 Martin, William C.
 Mashburn, James D.
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 McAlister, Robin
 McBee, Sara
 McDonald, James E. II
 McElroy, Kellye
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 McGowan, William
 McNair, William R.
 Miller, Charles H.
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 Ortego, Terryl J.
 Owens, Sherry L.
 Pang, Robert R.

Park, John P.
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 Pesnell, Larkus H.
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 Snyder, Norman I.
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 Thorn, Garland M. Jr.
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White County

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Kiss, Csaba	Nix, John E.	Singhal, Sanjeev Kumar	Wood, Michael D.
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Lang, Patricia A.	Paul, William L.	Smith, Samuel D.	Young, Michael C.
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LeBoeuf, Dorothy	Pham, Thuylinh H.	Snow, Sandra L.	Yunus, Nauman
Lewellen, Thomas Lynn	Phillips, John D.	Snow, Sandra L.	Zini, James E.
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Arnautovic, Kenan I.	Ceola, Ashley	Ferguson, Max Ann	Hill, Chad
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Bacon, Lori	Chen, Jing X.	Fogata, Maria Luisa C.	Hogan, Scott
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Bakhtawar, Iram	Cisneros, Teresa C.	Garlapati, Butchaiah	Holmes, RonaBeth R.
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Baltz, Katherine	Cockrum, Holly D.	Gibson, Danielle C.	Horan, Chris
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Beeman, David	Cotner, James B.	Gordon, Gayle	Hudson, Amy R.
Behrens, Bing X.	Cottone, Joseph	Gray, Adam C.	Hudson, Stephen A.
Belk, Robert J.	Cowherd, Kristy	Gray, David J.	Huey, Sandra S.
Bell, Kimbra A.	Cox, Judd G.	Gray, Heather C.	Hussain, Mohammad A.
Benton, Thomas H.	Crisp, Constance J.	Gregory, J. Minor	Hutcheson, Belinda A.
Berestnev, Konstantin V.	Dalton, Cara	Griffin, David	Hutcheson, James
Berry, Michael F.	Dang, Stuti	Griffin, Gary E.	Hutson, Darrell
Bertrand, Skipper J.	Danner, Christopher	Guevara, Doyle P.	Iqbal, Imran
Bhutta, Adnan T.	Darby, Scott J.	Guinn, Robby C.	Irish, Katherine A.
Boger, Eve H.	Davis, Jonathan	Guinn, Spencer H.	Jabben, Merten
Boger, William G.	Day, Jeffrey L.	Gungor, Anil	Jackson, Hugh
Bonwich, Janina B.	DeNeen, Andrea' E.	Gungor, Neslihan	Jackson, Matthew P.
Boyd, J'Ann B.	Devarajan, Sumathi	Gupta, Navneet	Jain, Pawankumav
Braden, Chad C.	Diamond, Corey	Gutierrez, Miguel A.	Jayaprabhu, Sudheer M.
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Braswell, Camille S.	Dickson, Scott M.	Hajiamiri, Majid	Jewell, Shannon
Brito, Jorge A.	Diles, Timothy R.	Haley, Tonya	Johnson, Brad D.
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Buckner, Amy	Dugger, Joseph S.	Hanna, Kamil I.	Johnson, Sandra
Buffalo, Ryan P.	Duke, Anton L.	Haran, Panchapakesan P	Johnston, Alan C.
Bullard, Michelle	Dulin, William A.	Hardin, Christopher	Jussa, Murad M.
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Burr, William E. Jr.	Edington, Bruce L.	Harris, John E.	Kassel, Gregory P.
Burson, G. Timothy	Edwards, Frank Damon	Harris, Julie A.	Kasthuri, Saravanan
Burton, Todd	Elliott, Jana	Harris, Patricia K.	Kauphusman, Tessa M.
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- Kidd, Joseph Jr.
Kidd, Tracy L.
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Konis, George
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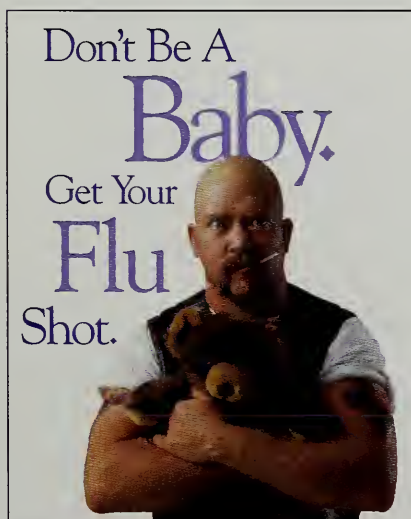
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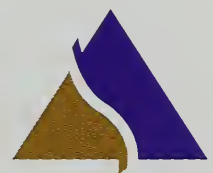
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Volume 95 Number 8

January 1999

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details begin on page 337

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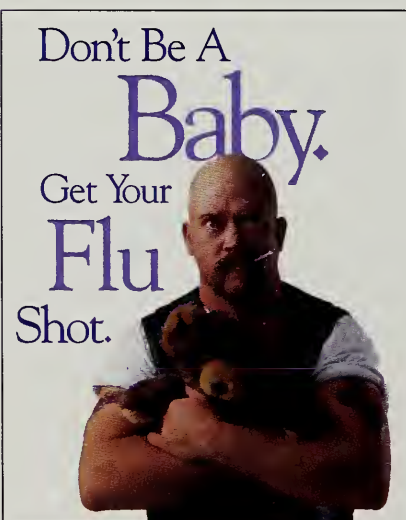
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Another Day, Another Dollar

Lee Abel, M.D.*

One morning on the way to work, a fancy luxury car raced past me. I caught a glimpse of the driver and noticed he was smoking a cigarette, holding a can of cola and talking on a cell phone. This is not an unfamiliar scene in the 90s, but on this particular morning it stimulated my imagination as to what this man's day might be like. I imagined...

Mr. X wakes up to his alarm clock and his first thought is that he's already late. There's so much to do, and he had intended on setting his alarm clock earlier than usual. He slept so poorly he thinks he might as well have gotten up earlier. He hurriedly dresses for success from his extensive wardrobe, thinking how he really needs to find the time to go shopping for some more clothes. As he puts on his pants, he notices they are too tight and he regrets the 16 ounce steak he ate last night while dining a client. He tells himself he really should exercise, but then he remembers how much he doesn't like exercise. It seems the healthier something is for you, the more boring it is, and he resents the unfairness of that.

He wonders if he won the account last night, which would make him number one in the company. He wonders if he talked too loud as those 3 double martinis sometimes make him do. There's no time for breakfast today, a diet Coke will have to do. He pops a couple of his expensive supplement tablets ("All Natural Youth/Energy Enzyme Formula") and glances at the headlines in the morning paper. He shakes his head at the lead story which confirms what a sorry state the world is in. His wife and children are still asleep and so he feels a moment of gladness because he'll be able to make an efficient getaway from home. As he gets in his car he notices a small dent in the door, and he curses the idiot who dinged his new car.

The morning at his job is intense, and, as usual, Mr. X has to straighten out several mistakes that the imbeciles he's forced to work with have caused. He develops a headache so he has his secretary fetch him some more cigarettes and some Excedrin from the convenience store. Mr. X has an important meeting across town, so lunch is the drive-through

window at McDonald's. The Big Mac, super size fries and Jumbo Coke are consumed on the way. On arrival, Mr. X is infuriated to find a blob of special sauce on his designer tie. After the meeting, he stops at a convenience store and buys some Roloids, a candy bar and a lottery ticket. He loses patience with the morons in front of him in line who dawdle around and waste his time. And to top it off the stupid store doesn't have any spot remover!

Mr. X doesn't make it home in time for dinner that night, but at least there's no evening meeting. When he does arrive home, the family is watching "must see" TV, and so Mr. X wolfs down his supper (a Frito Chili Pie, Dr. Pepper and some chocolate chunk cookies) in front of the TV in order to spend some time with the kids. They watch a fast paced disaster movie designed to get the audience's adrenaline surging. The commercials all cleverly (and loudly) urge consumption of more junk food, beer and products which are bigger and better, new and improved that seem guaranteed to bring the good life. After the movie, Mr. X gets up from his chair and notices that his "bad back" is hurting so he takes some Advil and gets in bed.

He feels an unease about the day that he doesn't understand and tells his wife he's too tired to talk. To fill the silence he grabs the remote and turns on the late night news. The last images of the day are of a channel 5 "action news" story about a brutal crime in a neighboring state. He takes some Tylenol PM and shuts off the light, but despite his exhaustion, sleep doesn't come.

Studies have shown that stress induced symptoms are responsible for most of the visits to primary care physicians. I've found that when I live like Mr. X, I don't feel good, and I have more symptoms than when I take the time to laugh, exercise, eat healthy, relax, give thanks and connect to the spiritual dimension of life. When I get wrapped up in getting more, having more and doing more, I start to experience burnout. It may seem obvious that our thoughts (and the resultant behaviors) affect how we feel, but many people have not made this connection. We see patients everyday who are, in effect, asking us the proverbial question: "Doctor, how can I feel better without giving up what's making me feel bad?" Physicians have

* Dr. Abel specializes in internal medicine and is affiliated with the Little Rock Diagnostic Clinic. He is a member of the editorial board for *The Journal of the Arkansas Medical Society*.

always taken this as a legitimate question and sought to provide symptomatic relief. Providing a prescription for a medication that will give symptom relief (even if only temporary) is straightforward and simple. Addressing the root causes is often not.

Some patients are so harried and hurried that the idea of living in a healthier manner seems to them unrealistic, unreasonable, unattainable and even un-American. Advertisements often encourage us to believe that the mind and body are not connected; they sell the idea that there is a pill or a product that can fix all our ills and make us happy and whole. The major world religions all teach that happiness and wholeness are found elsewhere, but these teachings are easily forgotten in the crowded, fast-paced and commercialized nature of modern life. We forget that having less and doing less can sometimes be more. We forget that a time of quiet reflection and meditation can be healing. We forget that a healthy lifestyle

helps both our body and our mind. It is a grateful way of living, and feeling grateful feels good. We forget that cultivating empathy and compassion is not only good for our mind and soul, it's also good for our body. When we are feeling open hearted we notice our body is able to relax, and we feel refreshed.

Healthy attitudes, beliefs and behaviors can lower our risk for disease but do not guarantee good health or longevity. Mr. X might live to a ripe old age while his neighbor with a healthy lifestyle and deep faith might die "prematurely." However, we can be certain that the day we have right now will be a better day if we take the time to remember that the most important things in life aren't the material things. This day will be a better day if we remember that life is more about gaining wisdom and learning to love than about acquiring possessions, power and prestige. When we help our patients remember, we help ourselves remember. I can always use the reminding.

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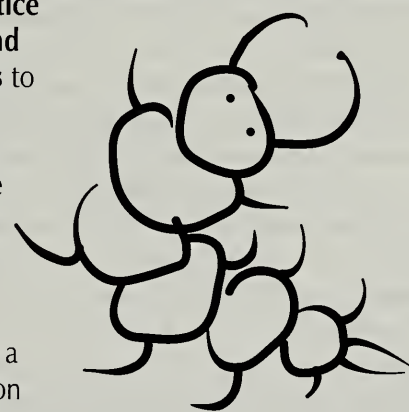
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Health Care Access Foundation

As of December 1, 1998, the Arkansas Health Care Access Foundation has provided free medical service to 14,759 medically indigent persons, received 27,952 applications and enrolled 54,246 persons. This program has 1,927 volunteer health care professionals including medical doctors, dentists, hospitals, home health agencies and pharmacists. These providers have rendered free treatment in 69 of the 75 counties.

Two of the World's Largest Medical Associations Call on Their Governments to Reduce Nicotine in Cigarettes to Non-Addictive Levels

If we start reducing the nicotine content in cigarettes now, within five to ten years the tobacco industry will no longer be able to addict children, and long-time smokers will find it much easier to kick the habit, according to an American Medical Association (AMA) report published in the British Medical Association's (BMA) journal *Tobacco Control*.

The report, written by the AMA's Council on Scientific Affairs, studied reducing tobacco-caused disease by gradually removing nicotine from cigarettes until they are no longer addictive. The authors concluded that gradually eliminating nicotine from cigarettes is possible, and that a nicotine reduction strategy would prevent adolescent tobacco addiction and assist the millions of current cigarette smokers in their efforts to quit.

The AMA and the BMA are calling on their respective governments to force the tobacco industry to reduce nicotine to non-addictive levels. "For years, the tobacco industry has deliberately manipulated its product to make it easier to addict smokers," said Reed Tuckson, MD, AMA Senior Vice President. "Now we are asking our governments to force them to do the exact opposite."

"The result of this research shows that there is something we can do to turn the tide on addiction," said Sir Alexander Macara, chairman of the UK consultative committee on public health and former chairman of BMA council. "We are proud and pleased to join the AMA in their call for government mandated changes in tobacco products. This will help current smokers quit, and keep new smokers, children especially, from becoming addicted," added Sir Alexander. "Both associations are committed to working within our respective systems to ensure that this issue remains at the forefront of our public health agendas."

Information provided by AMA News Release.

The Complexities of HIV Testing Mount

In most parts of the U.S., anonymous HIV test sites allow patients to be tested without revealing their names or addresses. But as treatment for HIV infection becomes more effective, policy makers are wondering if anonymous testing should be eliminated and routine reporting of infected persons to the public health authorities should be instituted.

In a retrospective, multistate survey of 835 patients with newly diagnosed AIDS between 1995 and 1996, the 192 patients who had been tested anonymously were diagnosed as infected with HIV significantly earlier in their course of infection than the 643 who had been tested by name. Anonymous test patients had higher mean CD4-cell counts at diagnosis of HIV (427 vs. 267 cells/mm³) and a longer time to the development of AIDS (1,246 vs. 718 days), resulting in a significantly longer time spent in medical care before an AIDS diagnosis.

A second study looked at patterns of HIV testing in six states that adopted a mandatory HIV-reporting program between 1992 and 1998. The volume of HIV tests done at public sites before and after the introduction of HIV reporting showed no important change in testing patterns among any of the groups at high risk for AIDS.

Comment: Worries that making HIV infection a reportable infectious disease might drive the epidemic underground seem unfounded. Still, such a policy eliminates anonymous HIV testing sites, which appear to steer infected persons into the health care system earlier than they might otherwise enter. - **A Zuger**

Bindman AB et al. Multistate evaluation of anonymous HIV testing and access to medical care. JAMA 1998 Oct 28; 280:-1416-20.

Nakashima AK et al. Effect of HIV reporting by name on use of HIV testing in publicly funded counseling and testing programs. JAMA 1998 Oct 28; 280:1421-6.

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Top 10 Health Problems That Target Women Differently Than Men

A new analysis on disease and disease treatment, conducted by the Society for the Advancement of Women's Health Research (SAWHR), revealed that diseases significantly impact women differently than men. The conclusions of a comprehensive scientific literature review in the emerging field of gender based biology were presented recently at the Society-spon-

sored eighth annual Scientific Advisory Meeting.

The Society, which pioneered the concept of gender based biology, identified the 10 most important findings in the field which are listed following this article. Many of the most dramatic gender differences are evident in autoimmune diseases such as multiple sclerosis, diabetes, lupus and rheumatoid arthritis.

"We have recently learned that women appear to process proteins less effectively than men which may be why women are three times more likely to contract an autoimmune disease," said Denise Faustman, M.D., Ph.D. Associate Professor of Medicine, Harvard School of Medicine. "This is just further evidence that gender will serve as an invaluable tool for optimizing future treatment regimens."

Dr. Faustman believes that future therapies will be based on re-educating the immune system rather than solely concentrating on the treatments that suppress the immune system.

Gender based biology is the field of scientific inquiry committed to identifying the biological and physiological differences between men and women including gender differences found at the system, organ, tissue, cellular, and sub-cellular level, and gender differences in response to pharmaceuticals. The recent advisory meeting focused on bridging the gap between basic and clinical research in studies of the brain, autoimmune diseases such as multiple sclerosis, and pharmacology (how and why men and women react differently to pharmaceutical compounds).

"The findings from gender based biology have the potential to revolutionize the way we understand health and disease for both men and women," said Phyllis Greenberger, MSW, Executive Director of the Society. "These differences extend beyond the most obvious areas such as the reaction to specific drugs, how men and women respond to the same disease, or metabolize the same compounds. The more scientists look for such differences, the more they find, and the more they recognize the importance of these differences."

Ms. Greenberger explained that the gender differences were selected based on their relative importance to the health of women and to improving scientific understanding of gender based biology. Each was the result of research published in a recognized scientific

journal.

The Society for the Advancement of Women's Health Research is a Washington-based advocacy group whose sole mission is to improve the health of women through research. This nonprofit organization was founded in 1990 when it brought to national attention the problem of the exclusion of women from major medical research studies, and the resulting need for greater funding for research on conditions experienced by women.

Women and Men:

10 Differences that Make a Difference:

STDs – Women are two times more likely than men to contract a sexually transmitted disease and 10 times more likely to contract HIV during unprotected sex with an infected partner.

Depression – Women are two to three times more likely than men to suffer from depression in part because women's brains make less of the hormone serotonin.

Osteoporosis – Women comprise 80 percent of the population suffering from osteoporosis, which is attributable to a higher rate of lost bone mass.

Lung Cancer – Women smokers are 20 to 70 percent more likely to develop lung cancer than men smokers.

Heart Disease – Women are more likely than men to have a second heart attack within a year.

Anesthesia – Women tend to wake up from anesthesia more quickly than men – an average of 7 minutes for women and 11 minutes for men.

Drug Reactions – Even common drugs like antihistamines and antibiotic drugs can cause different reactions and side effects in women and men.

Autoimmune Disease – Three out of four people suffering from autoimmune diseases such as multiple sclerosis, rheumatoid arthritis and lupus are women.

Alcohol – After consuming the same amount of alcohol, women have higher blood alcohol content than men.

Pain – Some pain medications (known as kappa-*opiates*) are far more effective in relieving pain in women than in men.

Information provided by news release from the Society for the Advancement of Women's Health Research.



AMS Newsmakers

Dr. Judy Abbott, a family practitioner in Beardon, was recently honored the 1998 Trio Achiever Award by the Arkansas Association of Student Assistants.

Dr. Carl L. Johnson, a physician of internal medicine, has recently been appointed to a position on the Little Rock Airport Commission by Little Rock's Board of Directors.

Dr. Ben E. Owens, Jr., a physician of internal medicine in Jonesboro, has been elected to the Simmons First Bank of Jonesboro's Board of Directors.

Dr. Weldon Rainwater, a retired Jonesboro physician, was recently recognized by the Jonesboro University Rotary Club for his years of dedication to health care to children as well as providing leadership to improve health care for the working poor.

Dr. Herbert B. Wren III, a Texarkana general surgeon, recently received the C.D. Taylor Presidents Award from Tulane University School of Medicine for his outstanding service in the field of medicine for his community.

The AMA Physician's Recognition Award is Awarded each month to physicians who have completed acceptable programs of continuing education. The recipients for the month of November are: Charles Marion Boyd, Little Rock; John Gregory Elders, Mountain Home; Joseph Miller Gettys, Little Rock; I. Torin Gray, Little Rock; James Laurence Jones, Fayetteville; John Wayne Joyce, Little Rock; Charles Austin Ledbetter, Harrison; Glenn Herbert Lytle, Van Buren; David Henderson Mosley, Camden; Amanda Bradshaw Raney, Hot Springs; Kenneth Vance Robbins, Little Rock; George V. Schaefer, Rogers; Sreemannarayana Vuppala, Little Rock; and Richard Nason Whitney, Fayetteville.

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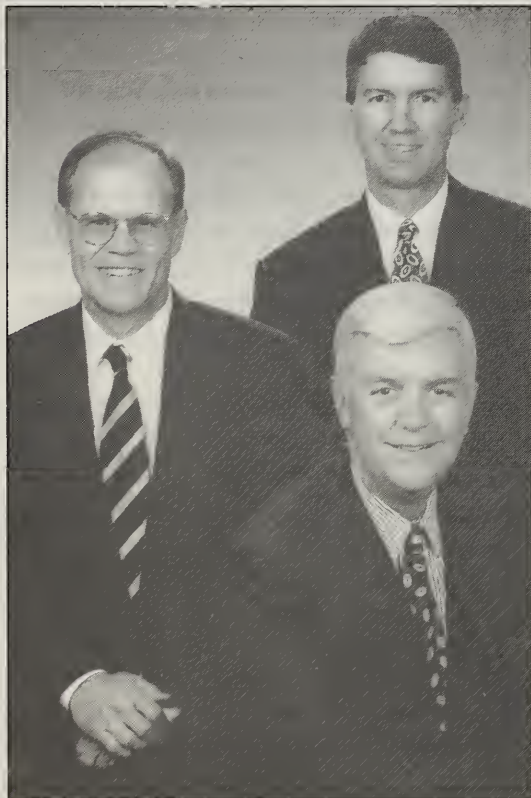
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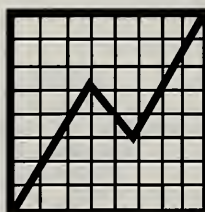
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Legislative OUTLOOK

Z. Lynn Zeno, AMS Director of Governmental Affairs

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more about
health care than
physicians.
Let your voice be
heard. The 82nd
Session of the
Arkansas General
Assembly begins
on Monday,
January 11, 1999.*

Fruit Basket Turnover

The 82nd Session of the Arkansas General Assembly begins on Monday, January 11, 1999. This session marks the full kick-in for legislative term limits and 57 of the 100 members of the House of Representatives will be brand new. Not one House member, including the Speaker of the House, will have served more than four years at the State Capitol. This means that more than two thirds of the House members have no institutional memory of the Any Willing Provider debate of 1995 . . . more than half have never heard testimony regarding managed care horror stories . . . and not one of the 100 House members were serving when we fought back the efforts of the soda pop lobby to repeal the soft drink tax that generates \$160 million dollars annually for the Medicaid program. Call it an opportunity or call it a challenge, but we've got lots of educating to do!

The Arkansas Medical Society House of Delegates met November 22 at the Annual Fall Meeting and reviewed the 41 issues that have already been identified for the upcoming session. A brief description of the proposed legislation by various classifications can be found elsewhere in this edition of the Journal.

How Can You Help?

Although medical society representation at the Capitol is a vital component to successful lobbying, the key to any legislative success is support from the "grassroots." When considering various legislative proposals, lawmakers want to know the views of their constituents. They are always impressed when a physician takes the time away from their busy schedule to call upon them. No one knows more about health care than physicians!

Contacting Your Legislators

The AMS will update you on important issues throughout the legislative session via the weekly *Legislative Update* and other special bulletins. If you need additional information before contacting your legislators, call the Society office and we will brief you on the status of legislation. Your conversations will be more effective with complete knowledge of the issues.

Generally, there is time to contact your legislators at home on the weekend. Do not hesitate to call them at home, they expect it; it goes with the territory. Occasionally, time is of the essence and you will be asked to call your legislators at the State Capitol. On issues of particular importance you may want to visit your legislators at the State Capitol. Call us and we can arrange those visits.

Stay in touch with your legislators and let them know your interest is sincere.

Encourage them to contact you regarding any medical related issues. Please alert your office staff that if a Senator or Representative calls . . . you need to be interrupted.

A list of 1999 legislators with their addresses and phone numbers is printed in this issue of *The Journal* for your convenience. This list will also be printed on the reverse side of your weekly *Legislative Update* bulletin.

MED-PAC

The Arkansas Medical Society Political Action Committee (MED-PAC) is a voluntary membership program of the Medical Society in which your annual PAC contribution provides campaign funds to both State and Federal candidates who best represent the concerns of the medical community. The Governmental Affairs Council, a group of doctors representing 10 AMS Councilor Districts and a variety of specialist, were good stewards of the MED-PAC funds. Table 1 represents the success of this year's political contributions.

If you have not contributed, please do so. We need to replenish our PAC funds for future elections.

Membership categories are:

President's Club – AMS Member or Spouse \$200
Sustaining – AMS Member or Spouse \$100
Resident – AMS Member or Spouse \$50
Medical Student – AMS Member or Spouse \$50

Personal or corporate checks may be made payable to MED-PAC, P.O. Box 55088, Little Rock, AR 72215-5088.

Table 1:

Arkansas Medical Society Political Action Committee

1998 contributions = \$31,000
188 candidates for state offices
96 contributions
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94% success rate



Possible Issues for 1999 General Assembly

MANAGED CARE

External appeals – a bill to establish an external appeals process for patients denied payment for medical services.

Health marts – a bill establishing group health purchasing plans that would be exempt from state insurance mandates and regulations.

Medical review by specialty – a bill requiring patient denials to be reviewed by a physician of the same specialty as the procedure in question.

Centralized credentialing – a bill requiring that all physicians, insurance companies, and hospitals use the centralized credentialing program maintained by the Medical Board.

Managed Care Regulations – a comprehensive bill regarding regulation of managed care entities.

Medical records privacy – a bill regulating the use and release of medical records.

Any willing provider/point of service – a bill regarding patients' ability to go outside managed care networks.

Off-label drug use – a bill regulating insurance company payment for off-label drug use.

Case managers – a bill defining the qualifications of case managers.

Fee schedule disclosure – a bill requiring insurance companies and managed care entities to disclose their fee schedules to participating providers.

Discount health cards – a bill regulating the sale and marketing of discount health cards.

Third party payor liability – a bill making insurance companies and managed care entities accountable for adverse medical decisions.

INSURANCE

Mental health parity – a bill requiring insurance companies to pay for mental illness as they would for any other disease.

Prompt payment – a bill requiring prompt payment of insurance claims.

Automobile insurance companies use of MCO's – a bill regarding automobile insurers use of health care provider networks.



Possible Issues for 1999 General Assembly

State employee insurance program – a bill regarding the reorganization of the state employees insurance program.

PUBLIC HEALTH

Bottle rockets – a bill prohibiting the sale and use of bottle rockets.

Primary seatbelt law – a bill making the failure to wear a seatbelt a primary traffic offense.

Blood alcohol limit for DWI – a bill lowering the blood alcohol limit from .10 to .08 for DWI violations.

Prostate cancer – a bill to fund prostate cancer education, treatment, and research.

Gun law - a bill requiring firearms to be locked and inaccessible to children. Parent/adult liable if child causes injury or damage.

ALLIED HEALTH CARE PROVIDERS

Physician assistants – a bill defining their scope of practice.

Advanced Practice Nurses – a bill allowing independent prescribing authority.

Advanced Practice Nurses – a bill requiring Medicaid to recognize them as primary care providers and reimbursing accordingly.

Advanced Practice Nurses – a bill requiring direct insurance company reimbursement.

Optometrists – a bill allowing optometrist to perform laser surgery.

Perfusionists – a bill licensing perfusionists.

Podiatrists – a bill allowing hospital privileges for podiatrist.

Podiatrists – a bill expanding the podiatrist scope of practice to include the ankle.

Dentists – a bill to allow oral surgeons to perform certain facial plastic procedures.

Radiology technologists – a bill establishing licensure for radiology technologist.

Pharmacists – a bill authorizing payment for pharmacist providing disease state management.

Use of the title Doctor – a bill clarifying who may use the title Doctor in providing health care.

WORKERS' COMPENSATION

Labor and trial lawyers – a bill to loosen the compensability requirements for injured workers.

Physician reimbursement – a bill requiring payment for initial treatment by physicians for injuries later to be determined noncompensable due to drug or alcohol findings.

TORT REFORM

Comprehensive tort reform – an omnibus bill addressing joint and several liability, collateral sources, product liability, limits on punitive damages, limits on contingency fees, and structured settlements.

Civil immunity for disaster care – a bill providing civil immunity to doctors and lawyers who provide uncompensated services during emergencies or disasters.

Honest Employer Reference Act – a bill to provide protection to former employers who provide employee reference information to prospective employers.

MEDICAID

Department of Human Services – bills to address the restructuring of DHS, funding of Medicaid services, and provider reimbursements.

Soft Drink Tax – a bill to repeal the soft drink tax that generates (with federal match) \$160,000 per year for the Medicaid program.

Tobacco Settlement – bills to distribute the multi-millions of dollars that Arkansas will receive from the National tobacco settlement.



Arkansas House of Representatives (1999-2000)

Representatives/Mailing Address/Home Telephone

Rep. Sarah S. Agee, 11898 Sage Rd., Prairie Grove, 72753-9168	501-846-4177	Rep. Janice A. Judy, 202 W. Maple St., Fayetteville, 72701-4132	501-521-4194
Rep. Jerry Allison, 26 CR 744, Jonesboro, 72401-0538	870-935-7765	Rep. Douglas C. Kidd, PO Box 137, Benton, 72018-0137	501-315-1555
Rep. Evelyn Ammons, PO Box 1005, Waldron, 72958-1005	501-637-2765	Rep. Barbara King, 106 Tulip Circle, Helena, 72342-1620	870-338-7983
Rep. Sam E. Angel II, PO Box 748, Lake Village, 71653-0748	870-265-2346	Rep. Jim Lancaster, 43 Toler St., Sheridan, 72150-7016	870-942-3481
Rep. Russell Bennett, 95 Lafayette 44, Lewisville, 71845	870-921-4866	Rep. Randy Laverty, PO Box 303, Jasper, 72641-0303	870-446-5593
Rep. Bill Bevis, 1632 Bevis Rd., Scott, 72142-9484	501-676-5630	Rep. Jim Lendall, 10625 Legion Hut Rd., Mabelvale, 72103-2207	501-562-0011
Rep. Gary Biggs, 1220 West Poplar St., Paragould, 72450-3501	870-239-5127	Rep. John Lewellen, 1922 Wolfe St., Little Rock, 72202-6046	501-372-5612
Rep. Cecile Bledsoe, PO Box 2457, Rogers, 72757-2457	501-636-2115	Rep. James C. Luker, PO Box 216, Wynne, 72396-0216	870-238-2223
Rep. Pat Bond, 2601 T. P. White Dr., Jacksonville, 72076-2559	501-982-8872	Rep. Becky Lynn, 105 South 3rd St., Heber Springs, 72543-3805	501-362-9430
Rep. Michael D. Booker, PO Box 45154, Little Rock, 72214-5154	501-376-7688	Rep. Sue Madison, 573 Rockcliff Rd., Fayetteville, 72701-3809	501-442-2997
Rep. Paul Bookout, 2104 Catharine Dr., Jonesboro, 72404-6963	870-935-8030	Rep. Jim Magnus, 10 Cimarron Valley Dr., Little Rock, 72212-3502	501-227-0464
Rep. Shane Broadway, 201 S.E. 2nd St., Bryant, 72022-4025	501-847-7796	Rep. Percy Malone, 518 Clay St., Arkadelphia, 71923-6024	870-246-7177
Rep. Geoff Buchanan, PO Box 5541, Bella Vista, 72714-0541	501-855-9363	Rep. W. K. (Mac) McGehee, Jr., PO Box 4106, Fort Smith, 72914-4106	501-452-5115
Rep. Ann H. Bush, PO Box 246, Blytheville, 72316-0246	870-763-7224	Rep. Jimmy "Red" Milligan, PO Box 68, Yellville, 72687-0068	870-449-6775
Rep. Jo Carson, PO Box 1886, Fort Smith, 72902-1886	501-646-2111	Rep. Jim Milum, 607 Skyline Dr., Harrison, 72601-2309	870-741-7532
Rep. Herschel W. Cleveland, PO Box 588, Paris, 72855-0588	501-963-2418	Rep. Randy Minton, 880 Minton Rd., Ward, 72176-8618	501-843-3147
Rep. M. Olin Cook, 266 South Enid Ave., Russellville, 72801-4534	501-968-4203	Rep. Andrew Morris, 2503 Eidson St., Springdale, 72762-6610	501-750-1845
Rep. Tom Courtway, PO Box 56, Conway, 72033-0056	501-336-9208	Rep. Steve Napper, 201 S. Chester St., Little Rock, 72201-2015	501-663-1491
Rep. Mike Creekmore, 1837 Scotch Pine Ln., Hensley, 72065-9024	501-888-1966	Rep. Steve Oglesby, PO Box 1, Hatfield, 71945-0001	870-389-6682
Rep. Keith Davis, 818 Kingshighway, Weiner, 72479-9281	870-684-7558	Rep. Pat Pappas, 2901 South Willow St., Pine Bluff, 71603-5061	870-536-4198
Rep. Joyce Dees, 401 South Main St., Warren, 71671-3323	870-463-8154	Rep. Marvin Parks, 246 Hwy 225 W., Greenbrier, 72058-9452	501-679-5306
Rep. Jim Bob Duggar, 2101 Johnson Rd., Springdale, 72762-6030	501-751-7575	Rep. Larry Prater, 8800 Prater Lane, Rudy, 72952-9373	501-474-6246
Rep. John A. Eason, 333 Lee 236, Marianna, 72360-8406	870-295-2837	Rep. David Rackley, PO Box 6806, Sherwood, 72124-6806	501-834-6235
Rep. Dean Elliott, 136 Apple Blossom Loop, Maumelle, 72113-6031	501-851-0062	Rep. Sandra D. Rodgers, PO Box 595, Hope, 71802-0595	870-777-3907
Rep. Steve Faris, Route 2, Box 365, Malvern, 72104-9625	501-337-7307	Rep. Mary Anne Salmon, 29 Heritage Park Cir., N. Little Rock, 72116	501-753-4521
Rep. Danny Ferguson, 212 McCollum Dr., Forrester City, 72335-2521	870-633-8256	Rep. Bill Scrimshire, Route 8, Box 569, Malvern, 72104-9219	501-337-1137
Rep. Lisa Ferrell, 7 Berkshire Dr., Little Rock, 72204-4805	501-565-9492	Rep. Harmon R. Seawel, 5761 Hwy 328 W., Pocahontas, 72455-8661	870-647-2571
Rep. Jake Files, 6508 Parkfront Dr., Fort Smith, 72916-8935	501-646-0191	Rep. Courtney Sheppard, PO Box 1132, El Dorado, 71731-1132	870-862-1543
Rep. George R. French, 190 Tracy Dr., Monticello, 71655-3867	870-367-2804	Rep. Martha A. Shoffner, PO Box 44, Newport, 72112-0044	870-523-6153
Rep. Jeff Gillespie, PO Box 524, Danville, 72833-0524	501-495-7912	Rep. Richard Simmons, 1751 CR 508, Rector, 72461-8010	870-522-3204
Rep. Billy O. Gipson, 5020 Hwy 139 S., Monette, 72447-9229	870-486-2592	Rep. Stephen M. Simon, 13 Bud Chuck Lane, Conway, 72032-9788	501-796-8466
Rep. Bobby L. Glover, PO Box 1, Carlisle, 72024-0001	870-552-3140	Rep. Mark Alan Smith, 4103 Lynn Dr., El Dorado, 71730-8668	870-862-7929
Rep. Mary Beth Green, 1807 Bunker Hill Dr., Van Buren, 72956-2836	501-471-9598	Rep. Roger Smith, 13 S. Pego Way, Hot Springs Village, 71909-2828	501-922-0730
Rep. Brenda B. Gullett, 28 Longmeadow, Pine Bluff, 71603-6300	870-541-0620	Rep. Terry Smith, 181 Caroline Acres Rd., Hot Springs, 71913-9740	501-525-0249
Rep. David M. Haak, 9 Wood Place, Texarkana, 71854-3333	870-772-1774	Rep. Marvin Steele, 912 W. Barton Ave., West Memphis, 72301-2803	870-735-3922
Rep. Rita Hale, 123 Westport Point, Hot Springs, 71913-7051	501-525-1933	Rep. Tracy Steele, PO Box 9267, North Little Rock, 72119-9267	501-376-9466
Rep. Joe Harris, Jr., PO Box 781, Osceola, 72370-0781	870-563-8360	Rep. Chaney Taylor, Jr., 659 Vine St., Batesville, 72501-4651	870-793-3545
Rep. Mike Hathorn, Route 2, Box 409, Huntsville, 72740-9649	501-665-2448	Rep. Larry R. Teague, PO Box 903, Nashville, 71852-0903	870-845-3708
Rep. David C. Hausam, 1214 N.E. 10th St., Bentonville, 72712-4906	501-273-7050	Rep. Lindbergh Thomas, PO Box 505, Grady, 71644-0505	870-479-3969
Rep. Jim Hendren, 15316 Hwy 59 N., Sulphur Springs, 72768-9103	501-298-3533	Rep. Ted Thomas, 900 S. Shackleford, #300, Little Rock, 72211-3848	501-227-6684
Rep. Boyd Hickinbotham, PO Box 326, Salem, 72576-0326	870-895-2319	Rep. Bobby Lee Trammell, 5213 Richardson Dr., Jonesboro, 72404	870-932-4639
Rep. Barbara Horn, PO Box 64, Foreman, 71836-0064	870-542-6665	Rep. Stuart Vess, 6717 Pontiac Dr., N. Little Rock, 72116-5232	501-835-6284
Rep. Don R. House, PO Box 505, Walnut Ridge, 72476-0505	870-886-3532	Rep. Wilma Walker, PO Box 205, College Station, 72053-0205	501-490-0235
Rep. Russ Hunt, PO Box 200, Searcy, 72145-0200	501-279-2928	Rep. Paul Weaver, PO Box 33, Violet Hill, 72584-0033	870-322-7338
Rep. Phillip T. Jacobs, 819 Miller St., Clarksville, 72830-2239	501-754-3036	Rep. Robert J. White, 412 Arkansas St., Camden, 71701-6614	870-231-4285
Rep. Gene Jeffress, 1483 Ouachita 47, Louann, 71751-8761	870-689-3537	Rep. Henry "Hank" Wilkins, IV, 717 West 2nd Ave., Pine Bluff, 71601	870-535-4488
Rep. Jimmy Jeffress, PO Box 1695, Crossett, 71635-1695	870-364-8291	Rep. Ed Wilkinson, PO Box 610, Greenwood, 72936-0610	501-996-4260
Rep. Bob Johnson, PO Box 173, Bigelow, 72016-0173 SPEAKER	501-759-2001	Rep. Arnell Willis, PO Box 356, Helena, 72342-0356	870-572-7717
Rep. Calvin Johnson, 3700 W. 12th Ave., Pine Bluff, 71603-2522	870-535-1075	Rep. Shawn A. Womack, PO Box 332, Mountain Home, 72654-0332	870-424-4422
Rep. Steve B. Jones, PO Box 3040, West Memphis, 72303-3040	870-739-2137	Rep. Jim Wood, PO Box 219, Tupelo, 72169-0219	870-744-2266

Arkansas State Senate (1999-2000)

Senators/Mailing Address/Home Telephone

Sen. Jim Argue Jr., 5300 Evergreen Dr., Little Rock, 72205-1814	501-224-8181	Sen. George Hopkins, PO Box 913, Malvern, 72104-0913	501-337-4442
Sen. Mike Bearden, PO Box 1824, Blytheville, 72316-1824	870-838-0303	Sen. Gary D. Hunter, 145 Spring Lake Dr., Mountain Home, 72653	870-425-2220
Sen. Mike Beebe, 211 West Arch Ave., Searcy, 72143-5331	501-268-9452	Sen. Tom Kennedy, PO Box 2396, Russellville, 72811-2396	501-967-3461
Sen. Dave Bisbee, 14068 Pyramid Dr., Rogers, 72758-0116	501-636-2516	Sen. Bill Lewellen, PO Box 403, Marianna, 72360-0403	870-295-6989
Sen. Jay Bradford, PO Box 8367, Pine Bluff, 71611-8367 PRO-TEM	501-535-5549	Sen. Jodie Mahony II, 106 W. Main, #406, El Dorado, 71730-5693	870-862-5950
Sen. John E. Brown, 17900 Ridgeway Dr., Siloam Springs, 72761-8866	501-524-4667	Sen. David Malone, PO Box 1048, Fayetteville, 72702-1048	501-442-0633
Sen. Eugene "Bud" Canada, PO Box 2110, Hot Springs, 71914-2110	501-525-3126	Sen. John A. Riggs IV, PO Box 1399, Little Rock, 72203-1399	501-223-8916
Sen. Jack Critcher, PO Box 79, Grubbs, 72431-0079	870-252-3592	Sen. Gene Roebuck, PO Box 1696, Jonesboro, 72403-1696	870-935-4010
Sen. Gunner DeLay, 4200 Free Ferry Lane, Fort Smith, 72903-2388	501-782-4727	Sen. Mike Ross, PO Box 374, Prescott, 71857-0374	870-887-5020
Sen. Wayne Dowd, PO Box 2631, Texarkana, 75504-2631	870-772-0525	Sen. Stanley Russ, PO Box 787, Conway, 72032-0787	501-329-8186
Sen. Jean C. Edwards, 8607 Earl Chadick Rd., Sherrill, 72152-8773	870-766-4049	Sen. James C. Scott, 321 State Hwy 15 N., Warren, 71671-9707	870-226-5336
Sen. Mike Everett, 412 Broadway, Marked Tree, 72365-1406	870-358-3560	Sen. Kevin Smith, 1609 Coker-Hampton Dr., Stuttgart, 72160-5713	870-673-3422
Sen. Jonathan S. Fitch, R. 1, Box 31, Hindsville, 72738-9701	501-789-2608	Sen. William L. Walker Jr., PO Box 1609, Little Rock, 72203-1609	501-375-5275
Sen. Allen Gordon, Box 558, Morrilton, 72110-0558	501-354-2122	Sen. Bill Walters, PO Box 280, Greenwood, 72936-0280	501-996-4520
Sen. Bill Gwatney, PO Box 156, Jacksonville, 72076-0156	501-982-4817	Sen. Doyle L. Webb, PO Box 1998, Benton, 72018-1998	501-315-4266
Sen. Morrill Harriman, 522 Main, Van Buren, 72956-5109	501-474-0480	Sen. Nick Wilson, PO Box 525, Pocahontas, 72455-0525	870-892-8853
Sen. Jim Hill, 100 Center, Nashville, 71852-3821	870-845-3273	Sen. Tim Wooldridge, 100 College Dr., Paragould, 72450-9775	870-239-8763
Sen. Cliff Hoofman, PO Box 1038, North Little Rock, 72115-1038	501-758-9692		

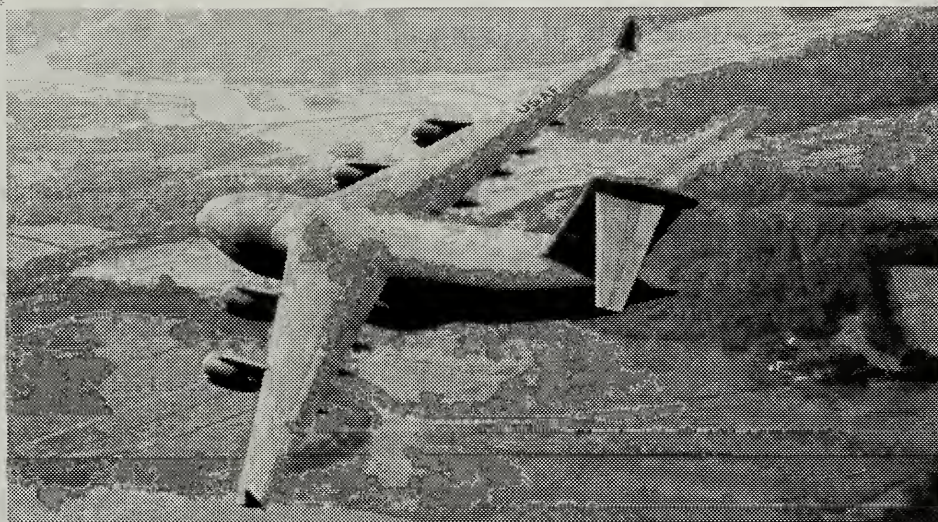
U.S. Congressional Correspondence:

Honorable Tim Hutchinson, United States Senate, 245 Dirksen Senate Office Building, Washington, DC 20510	(202) 224-2353
Honorable Blanche Lincoln, United States Senate, temporary telephone number in Washington DC is listed.	(202) 224-6238
Honorable Marion Berry, US House of Representatives, 1407 Longworth House Office Building, Washington, DC 20515	(202) 225-4076
Honorable Jay Dickey, US House of Representatives, 2453 Rayburn House Office Building, Washington, DC 20515	(202) 225-3772
Honorable Asa Hutchinson, US House of Representatives, 1535 Longworth House Office Building, Washington, DC 20515	(202) 225-4301
Honorable Vic Snyder, MD, US House of Representatives, 1319 Longworth House Office Building, Washington, DC 20515	(202) 225-2506



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Washington Prospective

With all the emphasis on the upcoming session of the **STATE** legislature, we must also remember that there will be a continuation of the health care debate in the **NATIONAL** legislature in 1999. Featured below is a comparison of the major differences between the Democratic plan and the Republican plan that was left hanging in the balance of the last session of the U.S. Congress.

Regardless of political affiliation, most physicians feel their first allegiance is to their patients. Physicians also agree that medical decision making should be left to patients and their physicians . . . not the insurance carriers. The Republican plan sets a standard that insurance companies determine medical necessity. Unfortunately, the Arkansas Congressional Delegation seems to be split right down Party lines.

Please contact your individual U.S. Representative and both U. S. Senators and urge them to support the principles contained in the "Patients' Bill of Rights," especially the provision that holds Health Care Plans accountable for their medical decision making.

Congressional Plans

Major Differences

Patients' Bill of Rights

Democrat Version

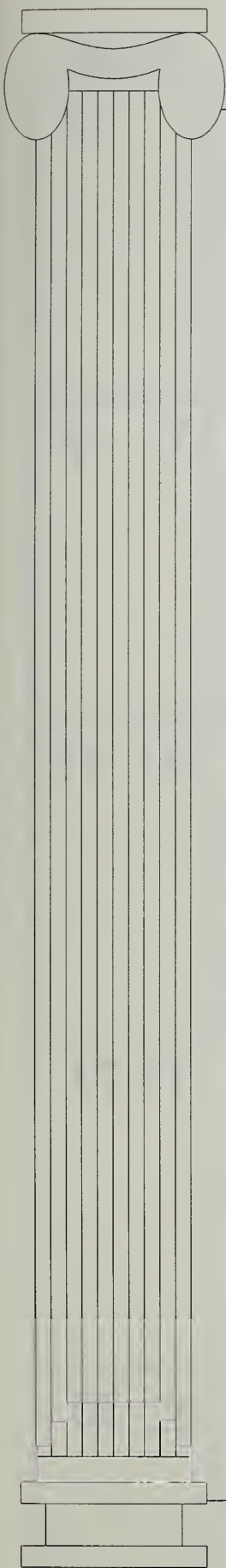
Patient Protection Act

Republican Version

- ⦿ **Payment for emergency services**
Coverage for "prudent lay person" definition of emergency room treatment.
- ⦿ **Drug formularies**
Allows health care professionals to have input into formularies and provides mechanism whereby patients may receive off-formulary drugs if treating physician determines medical necessity.
- ⦿ **Point of service option**
Allows POS option for patients, at their own expense, to go to providers who are not included in their health plan's network.
- ⦿ **Specialist referrals**
Provides for standing referrals for patients requiring routine care from specially trained physicians (*e.g. multiple sclerosis, arthritis, etc.*)
- ⦿ **Consumer protections**
No expansion of Erisa exemptions.
- ⦿ **Health plan accountability**
Health plans could be held legally liable for patients injured as a result of their medical decision making.

- ⦿ **Payment for emergency services**
Creates a new standard of "prudent emergency medical professional" definition of emergency room treatment.
- ⦿ **Drug formularies**
Requires health plans to provide enrollees with information on the extent a formulary is used and how it was developed.
- ⦿ **Point of service option**
Health plans would not have to offer POS option if they could demonstrate an actuarial speculation that their premium would increase by more than 1%.
- ⦿ **Specialist referrals**
No special protections for special needs patients.
- ⦿ **Consumer protections**
Creates association health plans, health marts, and other programs that expand the number of patients beyond the reach of state consumer protections.
- ⦿ **Health plan accountability**
Creates an external appeals process (*patient is charged a \$100 fee*) and the outside review is limited to determining whether the plan followed its own definition of medical necessity.

Forever sets a standard of insurance companies determining medical necessity instead of physicians.



1999

Arkansas Medical Society

"Doctor of the Day"

Program Calendar

The Arkansas Medical Society Department of Governmental Affairs appreciates the participation by the many physicians who are volunteering their time to serve as "Doctor of the Day" during the 82nd General Assembly.

The Society feels that in addition to the service provided to the legislators, the more AMS members we can involve in the legislative process the better.

The following pages list a calendar of physicians by day of volunteer service. The Society recognizes and extends a special thanks to "Doctors of the Day" participants.

JANUARY 1999

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11 Michael F. Knox, MD Little Rock R Andrew M. Monfee, MD Russellville FP	12 Stephen K. Magie, MD Little Rock OPH Samuel W. Peebles, MD Nashville FP	13 Robert Barrow, MD Little Rock OM/FP Morris M. Henry, MD Fayetteville OPH	14 Robert F. McCrary Jr., MD Hot Springs NEP Nicholas Schwedock, MD Lewisville FP	15 Steven W. Strode, MD Little Rock FP	16
17	18 C. Stanley Applegate Jr., MD Springdale GP Jeffrey Ketcham, MD Little Rock APM	19 Edward J. Jones, MD Batesville OBG Charles H. Rodgers, MD Little Rock FP	20 G. Edward Bryant Jr., MD West Memphis OPH Bruce K. Burton, MD Malvern IM	21 Paul Zelnick, MD Little Rock IM/HEM Kimberly Garner, MD Pine Bluff FP	22 Gene Shelby, MD Hot Springs EM	23
24 & 31	25 James E. Wise Jr., MD Marvell EM	26 Lawrence J. Schemel, MD Springdale FP Suzanne Yee, MD Little Rock FPS/OTO	27 John W. Baker, MD Little Rock GS Dwight M. Williams, MD Paragould FP	28 A. Sharon Meador, MD Little Rock OM Terrence Yates, MD Searcy FP	29 Don G. Howard, MD Fordyce FP	30

FEBRUARY 1999

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Jeffrey Barber, MD Little Rock OTO Barry Hendrix, MD Paragould FP	2 Mark E. Miller, MD Russellville FP Samuel B. Welch, MD Little Rock OTO/HNS	3 Roger E. Cagle, MD Paragould FP John E. Hearnberger, MD Little Rock CDS/TS	4 R. Kyle Roper, MD Hot Springs FP	5 Roger Troxel, MD Pocahontas FP Douglas L. Maglothin, MD Jonesboro FP	6
7	8 John J. Jucas, MD El Dorado D Roland C. Reynolds, MD Newport FP	9 B.D. Fine Jr., MD Hot Springs NEP Francis M. Henderson, MD Mount Ida OM/EM	10 Joe H. Wharton, MD Warren FP	11 Jack L. Blackshear Jr., MD Little Rock IM Hamilton R. Hart, MD Fayetteville FP	12 Kurtis Vinsant, MD Little Rock GS/VS	13
14	15 James Harrell Jr., MD Little Rock CDS Harold F. Wilson, MD Monticello FP	16 James A. Arnold, MD Fayetteville ORS G. Randy Guntharp, DO Pocahontas FP	17 R. Stephen Tucker, MD Little Rock FP	18 Herbert F. Fendley, MD Pine Bluff FP/IM Richard E. Brown Jr., MD Fayetteville OPH	19 H. Mark Attwood, MD Pine Bluff FP J. David Talley, MD Little Rock CD	20
21	22 Martin J. Carey, MD Little Rock EM	23 Carlton L. Chambers III, MD Little Rock OTO Kenneth W. Purvis, MD Warren FP	24 Charles R. Feild, MD Little Rock PD Mark A. Strauss, MD Little Rock IM/OM	25 Robert E. Jones, MD DeValls Bluff GP James E. Zini, DO Mountain View FP	26 Richard L. Hayes, MD Jacksonville FP	27
28						

MARCH 1999

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Richard L. Taylor, MD Berryville FP	2 Patrick J. Savage, MD Jonesboro PUD/IM Darren E. Flamik, MD Little Rock EM	3 James T. Meredith Jr., MD Forrest City FP Robert E. Sanders, DO Fort Smith IM	4 Lawrence F. Braden, MD Camden FP Robert B. Scott, MD McGehee GS	5 Howard S. Brown, MD Paragould GE	6
7	8 Stephen M. Schexnayder, MD Little Rock MPD	9 George Conner, MD Forrest City FP Gary M. Petrus, MD North Little Rock OTO	10 Gregory M. Loyd, MD Greenwood FP Carl J. Raque, MD Little Rock D	11 J. Larry Lawson, MD Paragould GS	12 Barry V. Thompson, MD Crossett FP	13
14	15 Judith E. McGhee, MD Little Rock GPM/AM	16 Joe H. Stallings Jr., MD Jonesboro FP	17 A. Bruce Junkin, MD Newport FP Jim English, MD Little Rock OTO/FPS	18 Scott J. Stern, MD Little Rock OTO/HNS	19 Benjamin R. Lowery, MD Searcy OPH	20
21	22 <i>This date open for a volunteer "Doctor of the Day." Call the Society office at 1-800-542-1058.</i>	23 Daniel Davidson, MD Searcy FP	24 James G. Sheridan, MD Piggott IM	25 <i>This date open for a volunteer "Doctor of the Day." Call the Society office at 1-800-542-1058.</i>	26 J. Mayne Parker, MD Little Rock OPH	27
28	29 James Suen, MD Little Rock OTO/HNS	30 <i>This date open for a volunteer "Doctor of the Day." Call the Society office at 1-800-542-1058.</i>	31 <i>This date open for a volunteer "Doctor of the Day." Call the Society office at 1-800-542-1058.</i>			

APRIL 1999

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 <i>This date open for a volunteer "Doctor of the Day." Call the Society office at 1-800-542-1058.</i>	2 Gordon E. McCarty Jr., MD Helena GP/EM	3
4 <i>This date open for a volunteer "Doctor of the Day." Call the Society office at 1-800-542-1058.</i>	5 <i>This date open for a volunteer "Doctor of the Day." Call the Society office at 1-800-542-1058.</i>	6 H. Kevin Beavers, MD Russellville IM	7 <i>This date open for a volunteer "Doctor of the Day." Call the Society office at 1-800-542-1058.</i>	8 <i>This date open for a volunteer "Doctor of the Day." Call the Society office at 1-800-542-1058.</i>	9 <i>This date open for a volunteer "Doctor of the Day." Call the Society office at 1-800-542-1058.</i>	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

To
*those physicians who volunteer
 through the Arkansas Health
 Care Access Foundation,
 Thank You!*
*As you can see from a sampling of
 letters we have received, your
 involvement in our program is
 appreciated and in many
 cases life-saving.*

It has been three days since you sent me to the doctor and I have a ways to go to be 100%, but I can breathe and walk across the room now. I had given up hope almost, and I remembered Arkansas Health Care. The doctor gave me two of the medicines I needed and the pharmacy you sent me to filled the antibiotics. Your doctor even "chewed" me out for not coming in two weeks previously. I'm starting to feel good again. God bless you.

Western Wildlife

As Easterners moved West, pioneers found animals as exotic as the landscape... buffalo, prairie dogs, bears, beavers, bighorn sheep, cougars, wolves and rattlesnakes. The eagle became a national symbol.

I wanted to thank everyone involved with this program. We had no one else to turn to and we were in desperate need of doctors and medications. Your program has helped us through a very difficult time.



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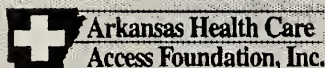
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Little Rock, AR

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I would like to say thank you first of all. Your program made it possible for me to have a mammogram when I had no where else to turn. I did not realize there was such a program. ...it is a much needed program. Thanks again.

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Due to your generous assistance, I was able to see an eye doctor and no longer fear the loss of my vision. Thank you all for being there.

When I needed medical attention, I was blessed with the knowledge of your program. There were kind and helpful people to guide me.

THANK YOU FOR MAKING THE DIFFERENCE!

Understanding Juvenile Violence: *An Arkansas Perspective*

Karen Y. Kelly, M.D.

In Arkansas, almost everyone has become concerned about violence by juveniles. This article looks at different statistical reports and compares state and national trends. It includes a review of medical articles that examine the suspected link between child abuse and later juvenile delinquency and describes effective prevention/intervention strategies. The article examines political issues concerning youth violence and ends with suggestions that physicians can incorporate into their own practices to help their patients deal with issues of violence.

Introduction

Violence in our society has seemingly reached epidemic proportions or at least has come to the forefront of our collective social consciousness. Violence by children has become more lethal and seems almost commonplace. What can we as a society do about it? Do we build more jails? Do we lower the age at which children can be tried as adults? Is violence what our young people have to anticipate in their future? Or can we develop a way to actually prevent children from becoming violent in the first place? Is there a link between child abuse and later juvenile delinquency and should we concentrate our efforts in this direction?

Methodology

First, a review and comparison was done of the Arkansas Department of Health Statistical Reports from 1990 and 1997. The National Clearinghouse on Child Abuse and Neglect Information report on "Child Maltreatment 1996: Reports from the States" was reviewed and the Arkansas statistics were compared to the national trends. The January 1998 report compiled by Arkansas Advocates for Children & Families, entitled "Juvenile Offenders in Arkansas 1990-1995, a Trend Analysis" was reviewed. Legal issues are incorporated that concern reform proposals about the transfer of juveniles to adult criminal court. Medical journal ar-

ticles concerning child abuse, violence and prevention strategies were also reviewed.

Results: Child Abuse in Arkansas

In 1990, a total of 14,885 reports of child abuse (including physical abuse, sexual abuse, and neglect) were investigated in Arkansas. The investigations resulted in 5,191 (35%) substantiated, 9,550 (64%) unsubstantiated and 144 (0.1%) pending cases.¹ By 1997, the number of reports had increased to 21,338. Investigations resulted in 5,762 (27%) substantiated, 12,430 (58%) unsubstantiated and 3,146 (14.7%) pending cases. This is a 69.7% increase in child abuse reports and a 9% increase in substantiated reports. National statistics indicate that 77% of perpetrators of child maltreatment were parents and an additional 11% were other relatives of the victim. An estimated two-thirds of substantiated reports came from professional sources: education, social services, law enforcement, and medicine.²

In 1996, child protective services agencies in the United States determined that almost one million children suffered abuse or neglect, an approximate 18% increase since 1990. Arkansas experienced a more modest 8.2% increase.³

The Link: Child Abuse and later Juvenile Violence

A study published in *Clinical Pediatrics* in 1990 found that maltreatment may contribute significantly to later delinquent behavior. The study reviewed the records of 378 children presenting to juvenile court for histories of child maltreatment. The children came from two groups: delinquents, who had engaged in criminal activity, and status offenders, who conducted non-criminal acts, such as running away and truancy. Fifty-five percent of the status offenders and 45% of the delinquents had substantiated histories of maltreatment. The percent of status offenders who had been sexually abused was seven times higher among runaways (35%) than among the other members of the group (5%). The percent of delinquents who had been

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physically maltreated was significantly greater among those convicted of committing violent crimes (27%) than among the non-violent delinquents (14%).⁴

Alarming study results revealed by the Child Welfare League of America showed that 9 to 12 year olds who were reported as abused or neglected in Sacramento County, California were 67 times more likely to be arrested for delinquent behavior than children of the same ages who had not been reported as abused or neglected. Children reportedly abused or neglected made up fully half of those arrested between the ages of 9 and 12, even though they made up just 1.4% of the 9 to 12 year old population.⁵

A study to assess the long-term effects of child abuse and neglect on delinquency, adult criminality, and violent criminal behavior used a prospective, specialized cohort that matched cases of abuse and neglect with those of controls in a metropolitan area in the Midwest. By June 1994, the subjects' average age was 32.5 years and almost two-thirds of the abused and neglected male subjects and African-American subjects in this sample had been arrested for nontraffic offenses. Childhood victims of physical abuse and neglect were more likely to have been arrested for a violent offense, after controlling for age, race, and sex. Childhood victims of sexual abuse were not at a significantly greater risk of an arrest for violence when compared with that of control subjects. However, this may be misleading since victims of sexual abuse were overwhelmingly females (84%) who had a record of fewer violent offenses.⁶ The National Institute of Justice concluded that being abused or neglected as a child increased the likelihood of arrest as a juvenile by 59%, as an adult by 27%, and for a violent crime by 29%. Those who had been abused or neglected were twice as likely as a demographically matched comparison group to have been arrested five or more times.

Researchers at the University at Albany conducted the Rochester Youth Development Study which is one of three collaborative longitudinal projects under the U.S. Department of Justice. One thousand seventh and eighth grade public school students (75% boys and 25% girls) in Rochester, New York, were sampled in the spring of 1988. African-Americans made up the majority of the sample (68%), while 17% were Hispanic and 15% were white. The sample was stratified to proportionally over-represent those students considered at high risk for delinquency and drug use, based upon both their gender and their residence in high-crime neighborhoods. However, all data analyses presented have been statistically weighted to represent the general cohort of all seventh and eighth graders in the Rochester public schools. Researchers began data collection in spring 1988 by privately interviewing youth and their primary caretakers. The in-

terviews were repeated every 6 months for four years. In addition to face-to-face interviews, data were collected from the Rochester public schools, Police Department, Department of Social Services, and other agencies that had contact with the subjects. While 32% of the nonmaltreated youth had official records of delinquency, a history of maltreatment raised this figure to 45%. In addition, by both official records and self-reports, maltreated subjects engaged in delinquent activities significantly more frequently.⁷

These studies indicate that many children who do not have a history of maltreatment as a risk factor become delinquent; however, many cases of abuse are never reported. What other factors do we need to examine to help us understand why the teen years are so turbulent? In a study at the McLean Hospital Brain Imaging Center, researchers used functional magnetic resonance imaging (fMRI) to compare the emotional processing of healthy 10 to 18 year olds with that of normal adults. The researchers focused on the level of brain activity in the amygdala, a region that guides instinctual or "gut" reactions, and the frontal lobe, the area of the brain responsible for reasoning. They found that when young adolescents process emotion, the level of brain activity in the amygdala surpasses the activity in the frontal lobe. However, as adolescents progress into adulthood, there is an age-related shift: activation in the amygdala decreases while activity in the frontal lobe increases. Adult brains use the frontal lobe to rationalize or apply brakes to emotional responses. Adolescent brains are just beginning to develop that ability.⁸

In a study that administered self-report questionnaires to high school students, exposure to violence was found to correlate with violent behaviors. This study is interesting because they included students who were victims of violence and also those who witnessed violence and further correlated this to trauma symptoms, such as anger, posttraumatic stress and depression. They found that violence exposure had moderate unique effects on violent behaviors (26% for males, 22% for females). The experience of both violence exposure and trauma symptoms explained a similar amount of variance in violent behaviors (24% for males, 20% for females). Anger was by far the most important trauma symptom in predicting violent behaviors for both sexes.⁹

The Arkansas Juvenile Justice System's Response to Increasing Youth Violence

The number of juveniles entering all segments of the Arkansas justice system significantly increased from 1990 through 1995. This included a 33% increase in juvenile arrests, a 69% increase in the number of juveniles held in all jails, a 55% increase in diversion pro-

grams, a 42% increase in filings in juvenile court, an 31% increase in the number of juveniles committed to the Division of Youth Services, a 99% increase in the number of juvenile cases filed in adult court, an 85% increase in the number of juveniles placed in the Arkansas Department of Correction. The significance of these increases is particularly noteworthy given the fact that the total number of Arkansas youth 10 to 17 years of age over this six-year period increased by just 0.6%.¹⁰

Some significant variations emerged in the number of arrests for particular offenses across the six-year period reviewed. These include a 389% increase in curfew and loitering arrests, which probably reflected the enactment of local curfew ordinances during this period; a 174% increase in narcotic drug arrests, a 58% increase in disorderly conduct arrests, and a 58% increase in arrests for other assaults. The number of arrests for liquor law violations actually decreased by 30% and the number of burglary arrests decreased by 19%.¹⁰

During this same six-year period, the legislature passed numerous laws that added crimes for which a 14 or 15 year old juvenile could be charged as an adult. When the legislature adopted the juvenile Code in 1989, the prosecuting attorney had the discretion to charge a 14 or 15 year old child at the time of the alleged act as an adult for the following crimes: capital murder, murder in the first or second degree, kidnapping in the first degree, aggravated robbery and rape. Since 1990, the legislature has added the following crimes: battery in the first and second degree, possession of a handgun on school property, aggravated assault committed with a deadly weapon, terroristic acts, unlawful discharge of a firearm from a vehicle, any felony committed while armed with a firearm, soliciting a minor to join a street gang, criminal use of a prohibited weapon and inchoate offenses (felony attempt, solicitation and conspiracy).¹⁰ At this time in Arkansas, prosecuting attorneys cannot charge any child under the age of 14 as an adult for any crime. For those who are charged as juveniles, the Arkansas Supreme Court in November 1998 upheld Arkansas law forbidding youngsters from using an insanity defense or pleading innocent by reason of mental disease or defect.

Nonwhite juvenile offenders are over-represented in almost all components of the justice system. Nonwhite juveniles constitute 23% of the state's juvenile population and 43% of all juvenile arrests. Nonwhites represent 69% of those admitted to the Department of Correction, 63% of those entering the Department of Community Punishment.¹⁰

Juvenile Justice Reforms: Treating Children Like Adults

High profile cases of violent juvenile crime, along with regular news reports of gang violence and violence in schools, have spurred the public's belief that

juvenile crime is out of control. It is true that violence historically has been "the work of the young" and that the overall crime rate has fallen slightly since 1991. However, juvenile crime has risen in proportion to the overall crime rate since the mid-1980s. In 1994, over a million youth under age 21 were arrested for the eight serious "index crimes," and almost 3,000 juveniles were arrested for murder, a 150% increase since 1985.¹¹

Like Arkansas, some states have reduced the minimum age for transfer of juveniles to adult court for trial and sentencing and eliminated barriers for transfer. Some states also have expanded the list of transferable offenses. Therefore, some immature and incompetent juveniles are being transferred to adult court. While the exact meaning of competence varies by statute, it probably means competence to stand trial in adult court. "Maturity," on the other hand, usually refers to judgment, psychosocial development or general cognitive abilities. Some transfers, then, fly in the face of the premise of juvenile justice: that youths should survive the mistakes of adolescence with their life chances intact.¹¹

Since the turn of the century, children's immaturity has provided the justification both for denying them certain rights and for shielding them from their own immature behavior. The United States Supreme Court stated that "minors often lack the experience, perspective, and judgment to recognize and avoid choices that could be detrimental to them. Holding in *Thompson v. Oklahoma* that the Eighth Amendment prohibited executing juveniles younger than 16, the Supreme Court considered whether the "juvenile's culpability should be measured by the same standard as that of an adult." Citing its own precedents and some empirical and psychoanalytic literature, the Court said adolescents are "less mature and responsible than adults" and therefore less culpable. Because of the egocentric thought processes of the juvenile, he or she is less likely to appreciate the seriousness of his or her criminal acts. Research on sensation seeking, impulsivity, moodiness, and pubertal hormones converges to suggest that compared to adults, adolescents are moodier and have poorer impulse control. Adolescents may have difficulty controlling their impulses, especially in emotional or unexpected situations.¹¹

Some proposed reforms are fully responsive to the public's demand for protection while retaining the *parens patriae* functions of the juvenile court. These include: abolishing mandatory transfer laws, requiring a competency evaluation before the transfer hearing, providing explicit transfer decision-making guidelines for judges, and extending the jurisdiction of the juvenile court to allow it to impose sentences into adulthood.¹¹

Violence Prevention

Olds et al in *JAMA* 1997 showed that the Nurse Home Visitor Model applied to at-risk families can sub-

stantially reduce the rate of child abuse and neglect and even criminal behavior by the mother and that these prenatal and postnatal visits up to 2 years can exert a positive effect that showed at 15-year follow-up.¹² The children born to these mothers also had sustained positive results 15 years later. The adolescents who had been randomized to the two treatment groups had fewer episodes of running away from home, arrests, and convictions, and violations of probation than the comparison group did. They also had fewer sexual partners and engaged in cigarette smoking and alcohol consumption less frequently. The concentration of beneficial effects among children born to unmarried women of low socioeconomic status is consistent with the results of other preventive interventions that have shown greater effects for children of families at greater social risk.¹³

Discussion

The problems of violence in Arkansas are multi-faceted, just as they are nationally. There is no one cause, just as there is no one solution. Many would argue that the pervasive violence in the media is part of the problem. Racial discrimination, socio-economic inequities and the resurgence of gangs are all factors. The increased accessibility of guns could help explain why youth violence has become more lethal. However, "the codes of conduct" - which informed youth when to walk away, when to talk and when to fight also have eroded. Juveniles use disrespect and perceived injustices as reasons (or excuses) for violence.¹⁴

Those of us who work with victims of violence are tired of picking up the pieces. We need a good prevention strategy and a broad attack on the problem. Intervention strategies, such as substance abuse and mental health treatments are important but prevention holds the key. Unfortunately, prevention is an unattractive public policy option for three reasons. One, you don't see the fruits of your labor because the event rate will simply decrease. Two, the full effect of implementation may not be observed for many years. Three, prevention programs may be seen as an invasion of privacy. However, the Nurse Home Visitor Model previously discussed was strictly voluntary and they have found that families are actually more likely to embrace the idea of a helper/teacher/nurse in the home than reject it, because they realize that they can use all the help they can get when they have limited resources themselves. It would be courageous for a politician to take up the cause of prevention. The more politically viable action would be to introduce legislation (once again) to lower the age at which a juvenile can be tried as an adult. This appears to contradict the limited studies that actually look at developmental characteristics of adolescents. Also, if we look at what happened when Arkansas lowered the age a child could be tried as an

adult to 14, the legislature later added many other crimes to the list in addition to the most serious, such as murder.

The well-documented risk factors for child abuse include unwanted pregnancy, aggressive tendencies, and aberrant childhood nurture in the parental family of origin. Both retrospective and prospective studies have documented these factors.¹⁵ Substance abuse by the parent or caregiver is strongly associated with child maltreatment. Current estimates indicate that between 50% and 80% of families involved with child protective services (CPS) are dealing with a substance abuse problem. Family income represents the strongest correlate of incidence across categories of child maltreatment. Poverty was especially related to serious neglect and severe violence toward children. No one fully understands the links between poverty and maltreatment. The stress and frustrations of living in poverty may combine with favorable attitudes toward the use of corporal punishment to increase the risk of physical violence. For instance, researchers have found that unemployment can lead to family stress and child abuse. When a family lacks the basic resources needed to provide for a child, neglect often results, although researchers suggest that dynamics over and above poverty (such as disorganization and social isolation) differentiate neglecting families from others. Indeed, most poor people do not mistreat their children. The effects of poverty appear to interact with other risk factors such as unrealistic expectations, depression, isolation, substance abuse, and domestic violence to increase the likelihood of maltreatment.¹⁶

Studies suggest that younger children, girls, premature infants, and children with more irritable temperaments are more vulnerable to abuse and neglect. Girls more than boys are likely to suffer from sexual abuse, but other types of maltreatment affect both sexes about equally. Maltreated infants and young children are significantly more likely to be reported to CPS agencies than are older children. The youngest children, who have fragile bodies, more often die from maltreatment. In fact 45% of the maltreatment-related fatalities from 1993 to 1995 involved infants and 85% involved children under age five.¹⁶

The accumulated evidence indicates that maltreated children often experience disrupted growth and development. Adverse effects in maltreated children's physical, cognitive, emotional, and social development accumulate over time. While the negative effects on development often can (but not always) be reversed, this reversal requires timely identification of the maltreatment and appropriate intervention. The psychological, emotional, or physical damage that a child suffers as a result of maltreatment depends on aspects of the abuse itself and the child's stage of development. In some cases, children do not appear to exhibit

significant effects from maltreatment. Personal characteristics such as optimism, high self-esteem, high cognitive ability, or a sense of hopefulness despite their circumstances may have buffered these children. Also, fewer episodes of abuse and having a supportive adult available may limit damaging effects. In some cases, however, effects of abuse may surface long after the experience.¹⁶

Physically abused children tend to be aggressive toward peers and adults, have difficulty with peer relations, and show a diminished capacity for empathy toward others. Studies of neglected toddlers show that they have an impaired ability to trust others. This may lead to feelings of being unloved and unwanted and may inhibit the development of the social skills needed to form healthy relationships with peers and adults. When a child cannot master developmental tasks (like learning to trust) at the appropriate age, the accomplishment of later tasks becomes more difficult throughout the life span.¹⁶

As they get older, abused and neglected children often perform poorly in school and commit crimes against persons. They more often experience emotional problems, depression, suicidal thoughts, sexual problems, and alcohol/substance abuse. Some children internalize reactions to maltreatment by becoming depressed or experiencing eating disorders and sleep disruption. Others externalize their reactions by engaging in physical aggression, shoplifting, or committing other crimes. The intensity, duration, and type of abuse, the presence of supportive adults, and the age of the child will shape the consequences of abuse. Since each child and maltreatment experience are unique, each child requires individual assessment and tailored supports.¹⁶

Physicians stand in a unique position to help identify families that need services. We should not underestimate our role as a trusted healer and confidante. Children diagnosed with conduct disorder, oppositional-defiant disorder and other behavior problems may need intensive intervention. However, sometimes just asking a few innocuous questions may yield some revealing answers that may clue a physician in to understanding how well a child is coping in life: What do you want to be when you grow up? How are things going at school? At home? What do you do when you get mad at somebody? And remember to ask about gun safety, when appropriate: Are there any guns in your house? Are they unloaded and locked separately from ammunition? Suggesting simple safety precautions to parents may prevent tragedy. Suggesting behavior management techniques, such as time-out or positive reinforcement for good behavior, will give parents tools to help them with the pitfalls of parenting. We need to teach children appropriate coping skills for stress and anger. Physicians can make suggestions for appropriate outlets, such as sports, creative writ-

ing, carpentry, crafts, or music, depending on the child's interests. Keeping a journal or becoming a volunteer can help many children make sense of life.

Developmentally, children are different than adults in their perceptions of the world around them and their ability to change and adapt. We can continue to lower the age at which we try children as adults for various crimes, but we cannot fool ourselves into thinking that this will deter other children because when they face a threatening situation they will continue to act with their "gut" feelings. Providing children with a sense of hope and self-worth may help them develop skills for coping with stress, establish goals in life and, ultimately, become better parents themselves.

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David Holmes, M.D.*
Mark St. Pierre, M.D.*
J. David Talley, M.D.*

Systemic Lupus Erythematosus: A Review of the Cardiac Manifestations

Systemic Lupus Erythematosus (SLE) is a multi-system autoimmune disease characterized by widespread inflammation of blood vessels and connective tissues. The diagnosis of SLE requires fulfillment of 4 of 11 American College of Rheumatology criteria (Table 1). Cardiac involvement in SLE was first reported in the early 1900s. It was not until recent years that the cardiovascular manifestations have become more apparent. This is largely due to a prolonged survival from improved diagnostic methods and treatment. SLE may involve all areas of the heart. From autopsy studies of patients with SLE, myocardial involvement reaches 81%, pericardial involvement is reported in 74%, and endocardial abnormalities in up to 63% of lupus patients.¹ We report a patient and review the cardiac manifestations of SLE.

Patient Presentation

A 43-year-old male with systemic lupus erythematosus (see cardiac diagnosis, Table 2) and an implantable cardioverter defibrillator for ventricular tachycardia, presented with a one-hour history of fluttering in his chest associated with light-headedness. He had no chest pain or shortness of air. He had noticed five to ten of these episodes over the last month, each lasting less than 20 minutes. A 12-lead electrocardiogram on admission revealed a wide complex tachycardia with a ventricular rate of 136 beats per minute (Figure 1). This rhythm converted spontaneously to normal sinus rhythm without intervention (Figure 2). A three

component pericardial rub was auscultated on cardiac exam. No murmurs were heard. He was admitted to the coronary care unit with a diagnosis of ventricular tachycardia and pericarditis. He had previously been treated with steroids for lupus and sotalol for ventricular tachycardia. In the coronary care unit, his prednisone dose was increased and sotalol was continued. The detection rate for slow ventricular tachycardia by his implantable cardioverter defibrillator was decreased

Table 1:
Criteria For Classification of Systemic Lupus Erythematosus

- | | |
|---|---|
| 1. Malar rash | 7. Polyserositis |
| 2. Photosensitivity | 8. Neurologic or psychiatric disorder |
| 3. Discoid skin lesions | 9. Hematologic abnormalities |
| 4. Arthralgia or nondeforming arthritis | 10. Positive antinuclear antibody |
| 5. Mucosal ulcers | 11. Immunologic abnormality: |
| 6. Renal Disorder | False positive VDRL, + lupus erythematosus preparation or antibody to double-stranded DNA or Sn antigen |

from 180 to 140 beats per minute. An echocardiogram showed a small pericardial effusion. Continuous monitoring in the coronary care unit revealed no further evidence of arrhythmia and he was discharged home.

He returned 5 days later after his implantable cardioverter defibrillator fired appropriately for an episode of ventricular tachycardia. He was placed on lidocaine, intravenous steroids, and started on azathioprine. After no further occurrences he was discharged.

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Table 2: Complete Cardiac Diagnosis

Etiology:	Systemic Lupus Erythematosus
Anatomy:	Echocardiogram: normal LV wall thickness, dilated LA, normal RA and RV, small pericardial effusion
Physiology:	Electrocardiogram: ventricular tachycardia Echocardiogram: mild to moderately decreased LV function, mild mitral regurgitation
Functional:	Class III - IV
Objective:	Deferred

He returned one day later with six more appropriate implantable cardioverter defibrillator discharges. Baseline liver and thyroid functions were measured, and pulmonary functions with carbon monoxide diffusing capacity were obtained. The sotalol was discontinued, and amiodarone was started.

He has continued to do well with no further symptoms or implantable cardioverter defibrillator firings. His amiodarone dose was adjusted. He will continue to follow up in the arrhythmia clinic with appropriate laboratory monitoring.

Discussion

Myocardial Disease

A large percentage of myocardial involvement in patients with SLE appears to be clinically silent with no obvious manifestation of cardiac impairment. Systolic dysfunction is common and is evident by an increased left ventricular systolic dimension and decreased left ventricular ejection fraction. This can be seen in both hypertensive and non-hypertensive lupus patients.² Diastolic dysfunction, secondary to increased left ventricular mass, has been diagnosed by echocardiography. Both systolic and diastolic dysfunction can present with signs and symptoms of congestive heart failure. In our patient, myocarditis was evident by his presentation of ventricular tachycardia. Also sinus tachycardia or conduction delays can also be found on ECG when there is myocardial involvement. Cardiac enzymes and endomyocardial biopsy can make the diagnosis. Myocarditis can be treated with high-dose steroids; azathioprine can be added if needed.³

Patients with SLE are also prone to develop systemic arterial hypertension. Systemic arterial hypertension may predispose patients to myocardial dysfunction. Between 14% and 69% of patients with lupus have systemic arterial hypertension. Comorbid renal disease and steroid therapy are thought to contribute in most cases.⁴

Pericardial Disease

Pericarditis is the most common clinical cardiovascular manifestation of SLE and usually represents as an exacerbation of the disease. Presentation can in-

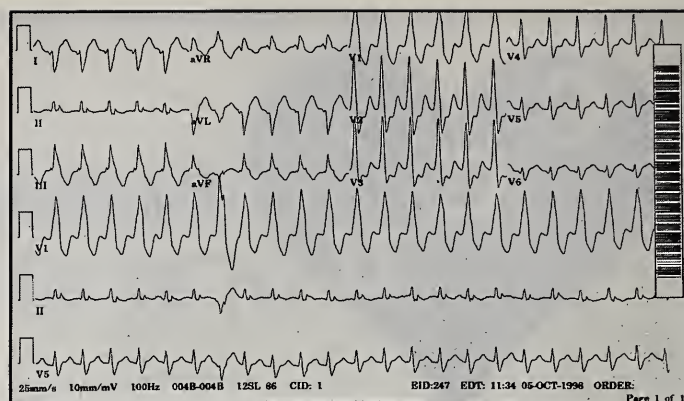


Figure 1: ECG at presentation shows ventricular tachycardia with a ventricular rate of 136 beats/min.

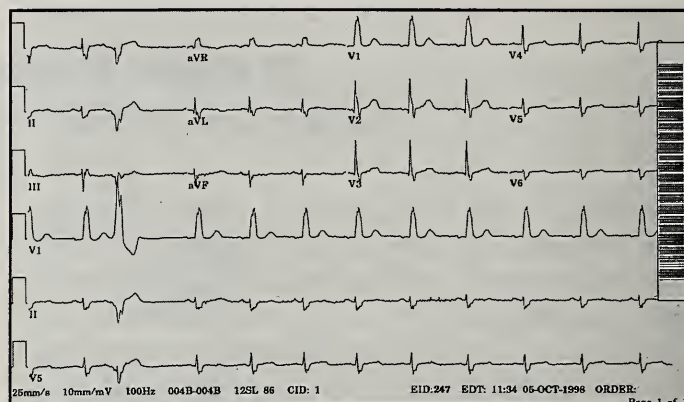


Figure 2: ECG following spontaneous conversion to normal sinus rhythm, rate of 69 beats/min.; right bundle and left anterior fascicular blocks.

clude precordial chest pain worsened by inspiration and relieved by bending forward, pericardial rub, tachycardia and fever. However, pericarditis may be painless and clinically silent. The erythrocyte sedimentation rate is usually elevated and the electrocardiogram demonstrates diffuse ST-segment elevation and T-wave inversion. Symptomatic pericarditis is treated with nonsteroidal anti-inflammatory agents. More serious cases may require steroids.

Pericardial effusions are frequent with asymptomatic and symptomatic pericarditis. This can be complicated by cardiac tamponade and requires immediate intervention. Also this may predispose patients to arrhythmias such as atrial flutter and atrial fibrillation may occur.

Valvular Disease

The classic valvular lesions for SLE are those first described by Libman and Sacks in 1924.⁵ The characteristic Libman-Sacks lesion is a small verrucous vegetation that is adherent to endocardium. This endocarditis is not strictly limited to the valve surface and but may also affect the mural endocardium, chordae tendinae, and papillary muscles. The aortic and mitral valves are most commonly involved. Abnormalities include valvular thickening, vegetation's and regurgitation. These valvular lesions are usually not progressive and typically resolve. It is not uncommon

mon for new abnormalities to develop. The valve disease is not related to other clinical features of lupus and does not differ with the length, activity, or severity of the disease.⁶

Complications from valvular disease include ischemic stroke, peripheral emboli and infective endocarditis. A careful cardiac examination should be the primary method of screening for valvular regurgitation or stenosis. Echocardiography can be performed if clinical suspicion of disease is high. Patients with valve disease may require prophylactic antibiotics to prevent infective endocarditis. Antiplatelet therapy might be appropriate for patients with valvular thickening or vegetations to prevent thrombus formation.

Coronary Artery Disease

Acute myocardial infarction in SLE is an important cause of morbidity and mortality. Both atherosclerosis and coronary arteritis may occur in patients with lupus. Diffuse and progressive atherosclerotic disease has been found in young lupus patients. The pathogenesis of the accelerated atherosclerosis is unknown but is probably multifactorial. The age of diagnosis of SLE, the duration of prednisone use as well as typical cardiac risk factors such as systemic arterial hypertension and hyperlipidemia are important in the role in premature atherosclerosis.⁷ There has been no established role between smoking, diabetes and family history of coronary artery disease in patients with lupus.⁸

Coronary arteritis is a less common cause of myocardial infarction in SLE. Diagnosis is made by coronary arteriogram, and treatment with high-dose steroids may improve the lesions.

Antiphospholipid Antibody Syndrome

Approximately one-third of SLE patients expresses cardiolipin antibodies or the lupus anticoagulant, and one-third of these patients have clinical complications that result in arterial and venous thrombosis and thrombocytopenia.⁹ The clinical cardiac manifestations of antiphospholipid syndrome include valvular disease such as verrucous vegetations, valvular thickening or regurgitant lesions. These nonbacterial lesions are associated with an increased incidence of cerebral ischemia. Patients with antiphospholipid syndrome that have received a valve replacement are at greater risk for thromboembolic events. Intracardiac thrombi have been described in all four cardiac chambers.¹⁰

Widespread cardiac dysfunction may occur in patients with normal valves and normal coronary arteries. This usually results from numerous small arteriolar hemorrhages. Premature myocardial infarction and early coronary artery bypass graft occlusion has also been reported.¹¹

Conclusion

SLE is multi-organ disease that frequently involves the heart. The disease can be clinically significant or silent. The most common manifestation are pericarditis, myocarditis, coronary artery disease, and valvular disease. Therapy can be directed at treating the SLE but also includes standard medical management for the clinical presentation.

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We want to say thank you...

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If you would be interested in volunteering, please call the Foundation at 1-800-950-8233.

**Arkansas Health Care Access Foundation, Inc.
PO Box 56248
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State Health Watch

Information provided by the Arkansas Department of Health, Division of Epidemiology

Reported Cases of Selected Diseases in Arkansas Profile for October 1998

The three-month delay in the disease profile for a given month is designed to minimize any changes that may occur due to the effects of late reporting. The numbers in the table reflect the actual disease onset date, if known, rather than the date the disease was reported.

Disease Name	Total Reported Cases YTD 1998	Total Reported Cases YTD 1997	Total Reported Cases YTD 1996	Total Reported Cases 1997	Total Reported Cases 1996
Campylobacteriosis	156	154	212	175	241
Giardiasis	141	203	151	220	182
Salmonellosis	553	394	405	445	455
Shigellosis	194	230	118	273	176
Hepatitis A	86	194	412	223	500
Hepatitis B	94	81	81	106	93
Hepatitis C	3	5	7	5	7
Meningococcal Infections	27	31	30	38	35
Viral/Aseptic Meningitis	59	24	32	26	38
Ehrlichiosis	13	22	7	22	7
Lyme Disease	7	27	27	27	27
Rocky Mtn Spotted Fever	24	33	21	31	22
Tularemia	25	24	23	24	24
Measles	0	0	0	0	0
Mumps	13	1	1	3	1
Gonorrhea	NA	NA	NA	4388	5050
Syphilis	NA	NA	NA	394	706
Pertussis	87	56	14	60	14
Tuberculosis	122	147	195	200	225

For a listing of
reportable diseases in Arkansas,
call the Arkansas Department of Health, Division of
Epidemiology, at
(501) 661-2893.

HIV in ARKANSAS

HIV (Including AIDS)

OCTOBER 12, 1998

Demographics	83-90	1991	1992	1993	1994	1995	1996	1997	1998	Total	%
Male	877	374	373	338	344	323	264	267	256	3416	81
Female	131	84	74	89	89	89	79	94	62	791	19
Under 5	12	8	5	3	5	2	1	9	4	49	1
5-12	7	1	0	0	0	1	0	0	0	9	0
13-19	29	18	25	11	21	11	21	19	8	163	4
20-24	155	43	48	59	58	44	29	38	29	503	12
25-29	249	100	99	106	80	73	60	54	56	877	21
30-34	233	114	106	89	93	97	83	76	65	956	23
35-39	161	86	63	75	69	80	70	66	73	743	18
40-44	81	47	39	45	48	46	35	49	40	430	10
45-49	41	19	25	16	27	22	18	33	21	222	5
50-54	15	14	14	10	10	17	14	8	14	116	3
55-59	13	3	12	6	6	6	6	6	3	61	1
60-64	3	2	6	5	9	7	1	2	2	37	1
65 and older	9	3	5	2	7	6	5	1	3	41	1
White	675	279	280	264	243	253	187	184	169	2534	60
Black	326	176	161	158	179	151	145	163	129	1588	38
Hispanic	2	3	4	1	7	3	6	5	7	38	1
Other/Unknown	5	0	2	4	4	5	5	9	13	47	1
Male/Male Sex	559	245	246	231	212	175	146	132	109	2055	49
Injection Drug User (IDU)	149	90	71	62	71	61	34	56	28	622	15
M/M Sex + IDU	115	32	38	28	24	30	26	18	11	322	8
Heterosexual	107	64	65	96	99	70	73	77	33	684	16
Sex-known risk											
Transfusion	22	8	9	1	2	4	2	0	1	49	1
Perinatal	12	8	5	3	5	3	1	9	3	49	1
Hemophiliac	24	5	6	2	3	5	0	1	2	48	1
Undetermined	20	6	7	4	17	64	61	68	131	378	9
TOTAL	1008	458	447	427	433	412	343	361	318	4207	100

For More Information:

HIV/AIDS Statistics: Mischelle Priebe, (501) 661-2323

HIV Services: Jan Burch, (501) 661-2150

STD Statistics: Mark Barnes, (501) 661-2137

HIV CASES BY COUNTY

County	1983-10/12/98	Nov 97-Oct 98
Arkansas	21	*
Ashley	19	0
Baxter	32	*
Benton	105	14
Boone	31	0
Bradley	16	*
Calhoun	8	0
Carroll	42	4
Chicot	19	0
Clark	22	*
Clay	*	0
Cleburne	16	*
Cleveland	*	0
Columbia	25	6
Conway	23	*
Craighead	79	9
Crawford	38	4
Crittenden	187	22
Cross	23	*
Dallas	9	*
Desha	20	*
Drew	14	*
Faulkner	63	*
Franklin	10	4
Fulton	*	0
Garland	158	15
Grant	4	*
Greene	22	0
Hempstead	24	*
Hot Spring	24	*
Howard	9	0
Independence	29	*
Izard	8	0
Jackson	10	0
Jefferson	174	12
Johnson	11	0
Lafayette	6	0
Lawrence	12	0
Lee	17	*
Lincoln	4	*
Little River	15	*
Logan	9	*
Lonoke	26	*
Madison	4	*
Marion	5	*
Miller	102	11
Mississippi	53	6
Monroe	17	*
Montgomery	7	*
Nevada	6	*
Newton	8	*
Ouachita	38	4
Perry	6	*
Phillips	45	*
Pike	*	0
Poinsett	16	0
Polk	12	0
Pope	58	*
Prarie	6	0
Pulaski	1396	123
Randolph	6	*
St. Francis	85	5
Saline	30	4
Scott	*	0
Searcy	5	0
Sebastian	227	12
Sevier	10	0
Sharp	10	0
Stone	6	*
Union	137	18
Van Buren	5	0
Washington	310	25
White	44	8
Woodruff	4	0
Yell	14	*
Prisons	135	25

*Case numbers of 1-3 are not reported.

AIDS in ARKANSAS

OCTOBER 12, 1998

Demographics	83-90	1991	1992	1993	1994	1995	1996	1997	1998	Total	%
Male	393	171	244	325	253	237	213	181	150	2167	85
Female	40	25	33	63	42	35	55	46	34	373	15
Under 5	8	6	2	2	1	2	0	8	3	32	1
5-12	2	1	0	0	0	2	0	0	2	7	0
13-19	4	3	2	4	3	1	4	2	1	24	1
20-24	33	14	14	31	22	11	14	11	10	160	6
25-29	99	42	65	78	45	46	46	30	23	474	19
30-34	106	42	70	96	80	74	75	51	37	631	25
35-39	85	37	56	77	52	49	54	55	49	514	20
40-44	39	33	27	48	40	35	37	36	24	319	13
45-49	26	6	22	26	22	17	21	20	16	176	7
50-54	9	5	7	10	12	15	5	6	15	84	3
55-59	9	4	8	8	5	6	7	4	1	52	2
60-64	4	1	2	5	10	5	1	1	1	30	1
65 and older	9	2	2	3	3	9	4	3	2	37	1
White	325	132	201	264	189	174	145	132	106	1668	66
Black	103	63	72	120	103	95	117	89	68	830	32
Hispanic	1	1	3	3	2	3	4	3	6	26	1
Other/Unknown	4	0	1	1	1	0	2	3	4	16	1
Male/Male Sex	256	114	176	229	162	138	125	95	76	1371	54
Injection Drug User (IDU)	44	29	41	68	47	48	28	45	27	377	15
M/M Sex + IDU	68	21	27	29	25	27	24	10	10	241	10
Heterosexual	26	12	20	52	41	35	61	41	24	312	12
Sex-known risk	20	8	5	1	4	4	3	0	1	46	2
Transfusion	8	6	2	2	1	3	0	8	4	34	1
Perinatal	7	5	4	5	6	7	1	0	2	37	1
Hemophiliac	4	1	2	2	9	10	26	28	40	122	5
Undetermined											
TOTAL	433	196	277	388	295	272	268	227	184	2540	100

For More Information:

HIV/AIDS Statistics: Mischelle Priebe, (501) 661-2323

HIV Services: Jan Burch, (501) 661-2150

STD Statistics: Mark Barnes, (501) 661-2137

AIDS CASES BY COUNTY

County	1983- 10/12/98	Nov 97 -Oct 98	Case Rate per 100,000
Arkansas	9	*	4.5
Ashley	16	0	0.0
Baxter	23	0	0.0
Benton	83	10	9.0
Boone	24	0	0.0
► Bradley	13	*	24.6
► Calhoun	7	*	16.3
► Carroll	27	4	19.8
Chicot	12	*	6.3
Clark	12	*	8.9
Clay	*	0	0.0
Cleburne	10	0	0.0
Cleveland	4	0	0.0
Columbia	17	*	7.6
Conway	15	*	5.0
Craighead	51	*	4.0
Crawford	29	*	4.2
► Crittenden	98	14	27.1
Cross	12	*	5.1
► Dallas	7	*	20.5
Desha	12	*	5.8
Drew	7	0	0.0
Faulkner	50	*	1.4
► Franklin	7	*	18.7
Fulton	*	0	0.0
► Garland	98	11	13.7
Grant	*	0	0.0
Greene	12	0	0.0
Hempstead	12	0	0.0
Hot Spring	19	*	10.9
Howard	6	0	0.0
Independence	18	*	5.9
Izard	8	0	0.0
Jackson	4	0	0.0
Jefferson	101	10	11.3
Johnson	7	0	0.0
Lafayette	*	*	10.2
Lawrence	12	0	0.0
Lee	10	0	0.0
► Lincoln	6	*	14.1
Little River	7	*	6.7
Logan	9	*	4.6
Lonoke	23	0	0.0
Madison	4	0	0.0
Marion	4	0	0.0
Miller	57	7	7.4
Mississippi	21	0	0.0
Monroe	7	0	0.0
Montgomery	5	0	0.0
Nevada	*	0	0.0
Newton	4	*	12.1
Ouachita	23	*	6.1
Perry	4	0	0.0
Phillips	22	*	3.5
Pike	*	0	0.0
Poinsett	8	0	0.0
Polk	9	0	0.0
Pope	29	*	2.0
Prarie	7	*	10.5
► Pulaski	849	78	21.0
Randolph	4	*	5.6
St. Francis	39	*	10.3
Saline	20	*	1.4
Scott	*	0	0.0
Searcy	5	0	0.0
Sebastian	142	12	11.4
Sevier	8	0	0.0
Sharp	8	0	0.0
Stone	*	*	9.4
Union	74	4	8.3
Van Buren	4	0	0.0
► Washington	192	19	15.3
White	28	7	11.8
Woodruff	4	0	0.0
Yell	10	*	5.3
Prisons	34	*	n/a

*Case numbers of 1-3 are not reported.

► Denotes top ten case rates 11/97-10/98.

New Members

BENTONVILLE

Jewell, Shannon A., Pediatrics. Medical Education, Internship/Residency, UAMS/Arkansas Children's Hospital, 1995/1997. Board certified.

FORT SMITH

Howell, Paul K. Jr., Endocrinology. Medical Education, Loma Linda University, Loma Linda, California, 1993. Internship/Residency, University of Oklahoma Health Science Center, Oklahoma City, 1994/1996. Board certified.

HOT SPRINGS

Longo, Margaret Fay, General Surgery. Medical Education, Louisiana State University School of Medicine, New Orleans, 1962. Internship, Confederate Memorial Medical Center, Shreveport, Louisiana, 1963. Residency, Mayo Graduate School of Medicine, Rochester, Minnesota, 1967. Board certified.

JACKSONVILLE

Wyatt, D. Neal, Family Practice. Medical Education, Oklahoma State University College of Osteopathic Medicine, Tulsa, 1995. Internship, Tulsa Regional Medical Center, 1996. Residency, In His Image Family Practice, 1998. Board certified.

JONESBORO

Kalife, Gerardo, Internal Medicine/Cardiology. Medical Education, University of Monterrey, Monterrey, NL, Mexico, 1989. Internship/Residency, Baylor College of Medicine, 1992/1994. Board certified.

Matthews, David Lee, Pediatrics. Medical Education, UAMS, 1981. Internship/Residency, Arkansas Children's Hospital, 1982/1984. Board certified.

LAKE VILLAGE

Shapira, Iuliana T., Internal Medicine. Medical Education, Carol Danila Medical School, Romania, 1990. Internship/Residency, Saint Barnabas Medical Center, New York, 1996/1998. Board certified.

LITTLE ROCK

Breau, Randall L., Otolaryngology. Medical Education, Louisiana State University Medical School, Shreveport, 1990. Internship/Residency, UAMS, 1991/1995. Board certified.

Lee, Maxine, Anesthesiology. Medical Education, Harvard Medical School, Boston, Massachusetts, 1988. Internship/Residency, Yale-Northwestern Hospital, New Haven, Connecticut, 1989/1992. Board certified.

McCasland, Leslie D., Internal Medicine. Medical Education, University of Tennessee at Memphis, 1997. Residency, University of Tennessee at Memphis, 1998. Board certified.

Nair, Balagopalan A., Medical Oncology. Medical Education, Grant Medical College, University of Bombay, India, 1985. Internship/Residency, Wayne State University, 1991/1993. Board certified.

PINE BLUFF

Davis, Kurt Glenn, General Practice. Medical Education, E. Tennessee State University, Johnson City, 1997. Internship, WBAMC, El Paso, Texas, 1998. Board certified.

Freeman, Tiswana Lisette, Pediatrics. Medical Education, UAMS, 1995. Internship, University of Mississippi, Jackson, 1998.

VAN BUREN

Griffin, Frankie Martin, Orthopedics. Medical Education, UAMS, 1991. Internship/Residency, UAMS, 1992/1996 and Residency, Beth Israel Hospital-North Division, 1997.

RESIDENTS

Chadha, Mandeep Singh, Pediatrics. Medical Education, University of Texas Medical Branch, Galveston, Texas, 1998. Residency, UAMS/Arkansas Children's Hospital.

Davis, John Christopher, Emergency Medicine. Medical Education, UAMS, 1998. Residency, UAMS.

Long, Michael Jack, Transition Medicine/Radiology. Medical Education, University of New Mexico, Albuquerque, New Mexico, 1998. Internship/Residency, UAMS.

Pitas, Grzegorz, Adam, Surgery/Anesthesiology. Medical Education, Medical Academy, Poznan, Poland, 1989. Internship/Residency, UAMS.

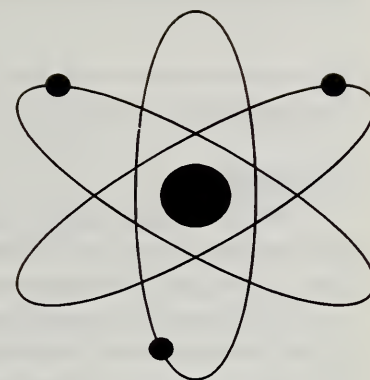
Schultz, Joseph M., Urology. Medical Education, UAMS, 1994. Internship/Residency, UAMS.

STUDENTS

William Claiborne Cobb

Radiological Case of the Month

Steven R. Nokes, M.D., Editor



Author

*Steven R. Nokes, M.D.
Edward E. C. Angtuaco, M.D.
Guy F. Gardner, M.D.*

History:

A 56-year-old woman presented with pulsatile tinnitus in the left ear and a palpable retroauricular thrill. She began to notice a variable pitch roaring six weeks ago, which became progressively louder. An MR examination was performed (figures 1 & 2).

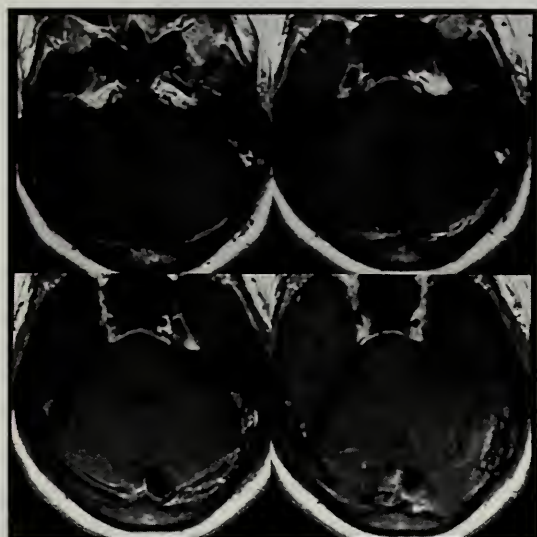


Figure 1



Figure 2

Figure 1: T₁-weighted (500/11) axial images through the cerebellopontine angle with contrast.

Figure 2: Collapsed 3D time of flight MR angiogram of the skull base.

Dural Fistula

Diagnosis: Dural fistula.

Findings:

The MR examination reveals the internal auditory canals to be normal. Subtle asymmetric enhancement of the transverse sinuses (left > right) is noted. The MR angiogram reveals an abnormal tangle of vessels on the left, posteriorly, overlying the transverse sinus.

An external left carotid conventional angiogram (figure 3) reveals a hypertrophied occipital artery with early filling of the transverse and sigmoid sinuses consistent with an arteriovenous malformation. Smaller feeding vessels arise from the superficial temporal artery and the posterior auricular artery. The dural fistula was subsequently embolized using PVA particles and a micro-coil (figure 4).

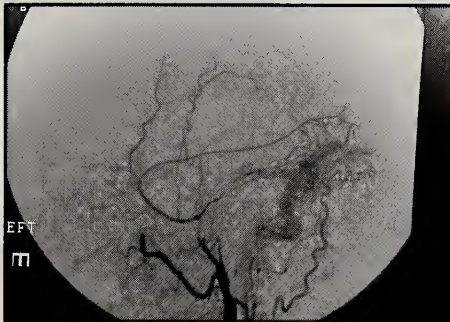


Figure 3a

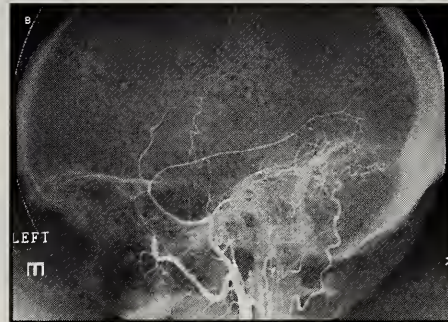


Figure 3b

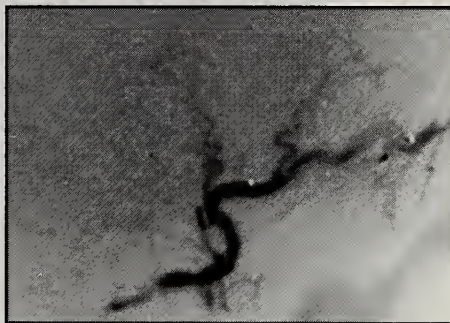


Figure 4a

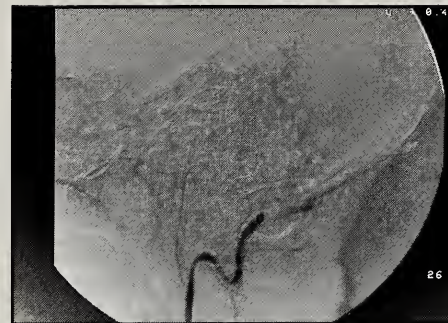


Figure 4b

Figure 3: Subtracted (a) and conventional (b) left external carotid arteriogram (lateral view).

Figure 4: Early (a) and late (b) images from transcatheter ablation of the dural fistula (lateral view).

Discussion:

Tinnitus is an uncommon syndrome that often has a treatable cause. Pulsatile tinnitus may be objective (can be heard by the patient and physician) or subjective (heard only by the patient). Meticulous otoscopy is essential to detect middle ear pathology (glomus tumor, high jugular bulb, or aberrant carotid) which is confirmed using high resolution CT. Otoscopically negative tinnitus is evaluated by duplex sonography if atherosclerotic carotid artery disease is suspected. If this is normal, and in the remainder of otoscopically normal patients MR with MR angiography is indicated to exclude dural sinus thrombosis, AVMs, fibromuscular hyperplasia and carotid dissection. Benign intracranial hypertension can be diagnosed on MRI, but often requires a lumbar puncture. Conventional angiography is performed in patients with a negative MR/MRA exam. Transcatheter ablation of an AVM is an elegant and effective treatment option for many AVMs.

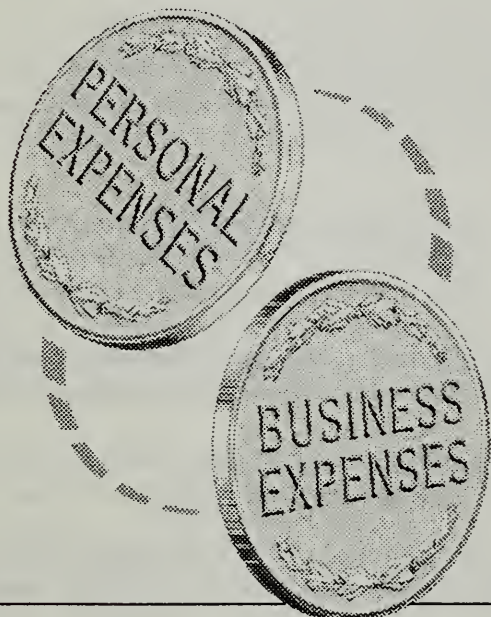
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Author: Edward E. C. Angtuaco, M.D., Radiology Consultants in Little Rock.
Author: Guy F. Gardner, M.D., Arkansas Otolaryngology Center in Little Rock.

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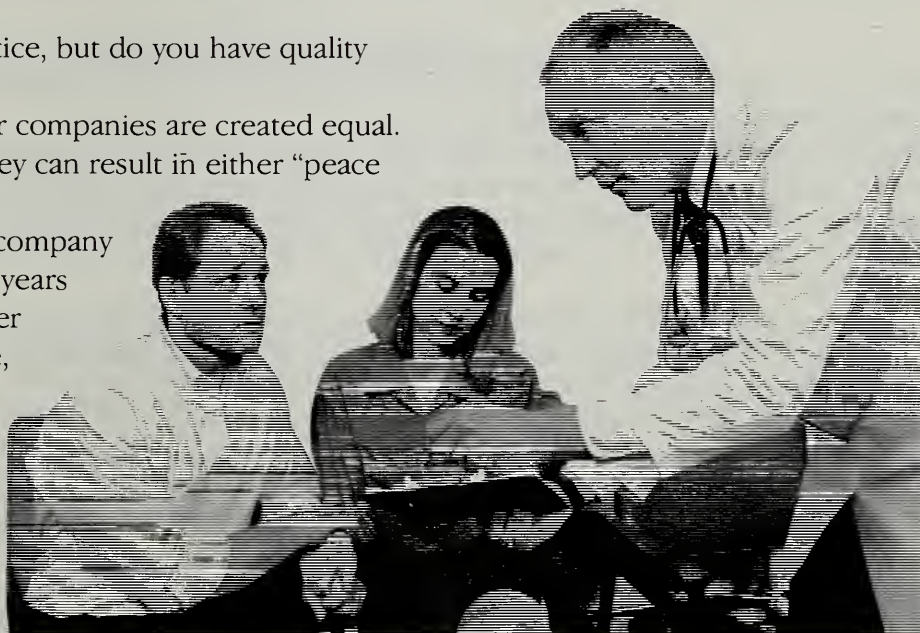
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In Memoriam

Edward P. Hammons, M.D.

Dr. Edward P. Hammons of Forrest City died Sunday, November 29, 1998. He was 57. He is survived by a cousin, Glenn Hammons of Forrest City and two aunts, O'Vaughan Gayden of Montgomery, Ala., and Maude Hammons of Pinson, Tenn., and several other cousins.

Albin J. Krygier, M.D.

Dr. Albin J. Krygier of Horseshoe Bend died Wednesday, November 11, 1998. He was 80. He is survived by two daughters, three grandchildren, and four great-grandchildren.

Resolutions

Charles R. Henry, M.D.

WHEREAS, the members of the Pulaski County Medical Society are sincerely saddened by the recent death of an esteemed member; Charles R. Henry, M.D.; and

WHEREAS, Dr. Henry was a respected member of this Society for over sixty years, always ready to give of his time and talent towards its betterment; and

WHEREAS, Dr. Henry demonstrated his loyalty to this Society and to his profession at large by serving over the years in numerous positions of leadership, including the office of President in 1970 and as President of the Arkansas Medical Society in 1951; and

WHEREAS, Dr. Henry instructed and inspired thousands of medical students during his long tenure as Professor and Chairman of the Obstetrics and Gynecology Department at the University of Arkansas College of Medicine; and

WHEREAS, Dr. Henry's concern for others was evidenced not only by his caring treatment of patients, but also by the pivotal role he played in the founding of Arkansas Blue Cross and Blue Shield and the Visiting Nurse Association.

BE IT THEREFORE RESOLVED:

THAT, this resolution be adopted and placed in the archives of the Society; and

THAT, a copy be sent to Dr. Henry's family as an expression of our heart-felt sorrow; and

THAT, a copy be sent to *The Journal of the Arkansas Medical Society* for publication.

James R. Weber, M.D.

WHEREAS, the members of the Pulaski County Medical Society are truly saddened by the recent death of an esteemed member, James R. Weber, M.D.; and

WHEREAS, Dr. Weber's unwavering dedication to his profession was manifested by thirty-seven years of membership in this Society and by service as President of the Arkansas Medical Society in 1989-90; the Arkansas Academy of Family Physicians in 1978-79; and the American Academy of Family Physicians in 1994-95, and;

WHEREAS, his patriotism was evidenced by his service as a General Medical Officer in the United States Air Force; and

WHEREAS, the memory of Dr. Weber as a kind and compassionate family doctor will live on as an abiding source of inspiration to hundreds of resident physicians he trained, thousands of patients he cared for and to all who were privileged to know him;

BE IT THEREFORE RESOLVED:

THAT, this resolution be adopted and placed in the permanent files of this Society; and

THAT, a copy of this resolution be sent to Dr. Weber's family as a token of our sincere sorrow; and

THAT, a copy be made available to *The Journal of the Arkansas Medical Society* for publication.

Both Resolutions Adopted:

November 18, 1998

By Order of the Memorials Committee

Fred O. Henker, III, M.D., Chairman

Bruce E. Schratz, M.D.

James W. Headstream, M.D.

Things To Come

March 19 - 21, 1999

Clinical Infectious Disease '99: A Management Review for the Practicing Physician. The Waldorf-Astoria Hotel, New York, New York. Sponsored by the Center for Bio-Medical Communication, Inc. For more information, call 201-342-5300 or E-mail: cmeinfo@cbcbiomed.com.

March 29 - April 1, 1999

11th Annual National Managed Health Care Congress. Georgia World Congress Center, Atlanta, Georgia. For more information, call 888-882-2500.

April 23 - 24, 1999

Oncology in the New Millennium. The Ritz-Carlton Hotel, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

April 23 - 30, 1999

58th Annual American Occupational Health Conference. Ernest N. Morial Convention Center, New Orleans, Louisiana. Sponsored by the American Col-

lege of Occupational and Environmental Medicine. For more information, call 847-228-6850 extension 180; FAX: 847-228-1856; Internet: <http://www.acoem.org>

May 1 - 6, 1999

American Society of Colon and Rectal Surgeons Annual Meeting/Celebrating the Society's 100 Year Anniversary. Washington, D.C. For more information, call 847-290-9184; FAX: 847-290-9203; Website: <http://www.fascrs.org/>.

May 19 - 21, 1999

Peripheral Artery Disease: Contemporary Strategies for Diagnosis and Therapy. Heart House Learning Center, Bethesda, Maryland. Sponsored by the American College of Cardiology. For more information, call 800-253-4636 ext. 652 or FAX: 301-897-9745

June 7 - 9, 1999

Approach to Advanced Heart Failure: Medical and Surgical Options. Heart House Learning Center, Bethesda, Maryland. Sponsored by the American College of Cardiology. For more information, call 800-253-4636 ext. 652 or FAX: 301-897-9745

Keeping Up

Continuing Medical Education Opportunities in Arkansas

January 19, 1999

Pain Management - St. Joseph's Regional Health Center, Mercy Room, Hot Springs. Time: 12:15 p.m. Lunch provided. Sponsored by St. Joseph's Regional Health Center. For more information, call (501) 622-1024.

January 22, 1999

Cerebrovascular Accidents - National Park Medical Center, Physicians Dining Room, Hot Springs. Time: 12:30 p.m. Lunch provided. Sponsored by National Park Medical Center. For more information, call (501) 620-1420.

February 12, 1999

Epidural or Spinal Hematoma with Concurrent Use of Low Molecular Weight Heparin and Spinal/Epidural Anesthesia - National Park Medical Center, Physicians Dining Room, Hot Springs. Time: 12:30 p.m. Lunch provided. Sponsored by National Park Medical Center. For more information, call (501) 620-1420.

February 16, 1999

ARORA - St. Joseph's Regional Health Center, Mercy Room, Hot Springs. Time: 12:15 p.m. Lunch provided. Sponsored by St. Joseph's Regional Health Center. For more information, call (501) 622-1024.

February 23, 1999

Wound Care - St. Joseph's Regional Health Center, Mercy Room, Hot Springs. Time: 12:15 p.m. Lunch provided. Sponsored by St. Joseph's Regional Health Center. For more information, call (501) 622-1024.

February 26, 1999

Hyperlipidemia - National Park Medical Center, Physicians Dining Room, Hot Springs. Time: 12:30 p.m. Lunch provided. Sponsored by National Park Medical Center. For more information, call (501) 620-1420.

Keeping Up

Recurring Education Programs

The following organizations are accredited by the Arkansas Medical Society to sponsor continuing medical education for physicians. The organizations named designate these continuing medical education activities for the credit hours specified in Category 1 of the Physician's Recognition Award of the American Medical Association.

FAYETTEVILLE-VA MEDICAL CENTER

Medical Grand Rounds/General Medical Topics, Thursdays, 12:00 noon, Auditorium, Bldg. 3

FAYETTEVILLE-WASHINGTON REGIONAL MEDICAL CENTER

Chest Conference, 1st Wednesday of every month, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Grand Rounds Conference, 3rd Wednesday of every month, 7:30 - 8:30 a.m., Baker Conference Center, breakfast provided.
Primary Care Conferences, every Monday, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided
Tumor Conference, every Thursday, 7:30 - 8:30 a.m., WRMC, Baker Conference Center, no fee, breakfast provided

HARRISON-NORTH ARKANSAS MEDICAL CENTER

Cancer Conference, October 22, November 3, and December 22, 12:00 noon, Conference Room

HOT SPRINGS-ST. JOSEPH'S REGIONAL HEALTH CENTER

Cancer Conference, every Monday, 12:15 p.m., St. Joseph's Mercy Room.
Chest Conference, Quarterly on last Tuesday of month beginning November 24, 12:15 p.m., St. Joseph's Mercy Room.
Medicine Not So Grand Rounds, Second Tuesday each month, 12:15 p.m., St. Joseph's Mercy Room. Lunch provided.

LITTLE ROCK-ST. VINCENT INFIRMARY MEDICAL CENTER

Cancer Conferences, Thursdays, 12:00 noon, Southwestern Bell/Arkla room. Lunch provided.
General Surgery Grand Rounds, 1st Thursday, 7:00 a.m. Southwestern Bell/Arkla Room. Light breakfast provided.
Interdisciplinary AIDS Conference, 2nd Friday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Journal Club, Tuesdays, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.
Pulmonary Conference, 4th Wednesday, 12:00 noon, Southwestern Bell/Arkla Room. Lunch provided.

LITTLE ROCK-BAPTIST MEDICAL CENTER

Breast Conference, 3rd Thursday, 7:00 a.m., J.A. Gilbreath Conference Center
Gastroenterology/Surgery Journal Club, dates vary, AR Gastroenterology Memorial Medical Plaza, Suite 3A. Call 501- 202-2673 or 202-3888 for more information.
Grand Rounds Conference, Wednesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Pulmonary Conference, Tuesdays, 12:00 noon, Shuffield Auditorium. Lunch provided.
Sleep Disorders Case Conference, dates vary, 12:00 noon. Call 202-2673 for date and location. Lunch provided.

MOUNTAIN HOME-BAXTER COUNTY REGIONAL HOSPITAL

Lecture Series, 3rd Tuesday, 6:30 p.m., Education Building
Tumor Conference, Tuesdays, 12:00 noon, Carti Boardroom

The University of Arkansas College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor the following continuing medical education activities for physicians. The Office of Continuing Medical Education designates that these activities meet the criteria for credit hours in category 1 toward the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

LITTLE ROCK-ARKANSAS CHILDREN'S HOSPITAL

Faculty Resident Seminar, 3rd Thursday, 12:00 noon, Sturgis Auditorium
Genetics Conference, Wednesdays, 1:30 p.m., Conference Room, Springer Building
Infectious Disease Conference, 2nd Wednesday, 12:00 noon, 2nd Floor Classroom
Pediatric Grand Rounds, Tuesdays, 8:00 a.m., Sturgis Bldg., Auditorium
Pediatric Neuroscience Conference, 1st Thursday, 8:00 a.m., 2nd Floor Classroom
Pediatric Pharmacology Conference, 5th Wednesday, 12:00 noon, 2nd Classroom
Pediatric Research Conference, 1st Thursday, 12:00 noon, 2nd Floor Classroom

LITTLE ROCK-UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

ACRC Multi-Disciplinary Cancer Conference (Tumor Board), Wednesdays, 12:00 noon, ACRC 2nd floor Conference Room.
Anesthesia Grand Rounds/M&M Conference, Tuesdays, 6:00 a.m., UAMS Education III Bldg., Room 0219.
Autopsy Pathology Conference, Wednesdays, 8:30 a.m., VAMC-LR Autopsy Room.
Cardiology-Cardiovascular & Thoracic Surgery Conference, Wednesdays, 11:45 a.m., UAMS, Shorey Bldg., room 3S/06
Cardiology Grand Rounds, 2nd & 4th Mondays, 4:00 p.m., UAMS Shorey Bldg., 3S/06
Cardiology Morning Report, every morning, 7:30 a.m., UAMS, Shorey Bldg. room 3S/07
Cardiothoracic Surgery M&M Conference, 2nd Saturday each month, 8:00 a.m., UAMS, Shorey Bldg. room 2S/08
CARTI/Searcy Tumor Board Conference, 2nd Wednesday, 12:30 p.m., CARTI Searcy, 405 Rodgers Drive, Searcy.

Centers for Mental Healthcare Research Conference, 1st & 3rd Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research

CORE Research Conference, 2nd & 4th Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research

Endocrinology Grand Rounds, Fridays, 12:00 noon, ACRC Bldg., Sam Walton Auditorium, 10th floor

Gastroenterology Grand Rounds, Thursdays, 4:00 p.m., UAMS Hospital, room 3D29 (1st Thurs. at ACH)

Gastroenterology Pathology Conference, 4:00 p.m., 1st Tuesday each month, UAMS Hospital

GI/Radiology Conference, Tuesdays, 8:00 a.m., UAMS Hospital, room 3D29

In-Vitro Fertilization Case Conference, 2nd & 4th Wednesdays each month, 11:00 a.m., Freeway Medical Tower, Suite 502 Conf. rm

Medical/Surgical Chest Conference, each Monday, 4:00 p.m., UAMS Hospital, room M1/293

Medicine Grand Rounds, Thursdays, 12:00 noon, UAMS Education II Bldg., room 0131

Medicine Research Conference, one Wednesday each month, 4:30 p.m. UAMS Education II Bldg. room 0131A

Neuropathology Conference, 2nd Wednesday each month, 4:00 p.m., AR State Crime Lab, Medical Examiner's Office

Neurosurgery, Neuroradiology & Neuropathology Case Presentations, Thursdays, 4:00 p.m., UAMS Hospital

OB/GYN Fetal Boards, 2nd Fridays, 8:00 a.m., ACH Sturgis Bldg.

OB/GYN Grand Rounds, Wednesdays, 7:45 a.m., UAMS Education II Bldg., room 0141A

Ophthalmology Problem Case Conference, Thursdays, 4:00 p.m., UAMS Jones Eye Institute, 2 credit hours

Orthopaedic Basic Science Conference, Tuesdays, 7:30 a.m., UAMS Education II Bldg., room B/107

Orthopaedic Bibliography Conference, Tuesdays, Jan. - Oct., 7:30 a.m., UAMS Education II Bldg.

Orthopaedic Fracture Conference, Tuesdays, 9:00 a.m., UAMS Education II Bldg., room B/107

Orthopaedic Grand Rounds, Tuesdays, 10:00 a.m., UAMS Education II Bldg., room B/107

Otolaryngology Grand Rounds, 2nd Saturday each month, 9:00 a.m., UAMS Biomedical Research Bldg., room 205

Otolaryngology M&M Conference, each Monday, 5:30 p.m., UAMS Otolaryngology Conf. room

Perinatal Care Grand Rounds, every Tuesday, 12:15 p.m., BMC, 2nd floor Conf. room

Psychiatry Grand Rounds, Fridays, 11:00 a.m., UAMS Child Study Center Auditorium

Surgery Grand Rounds, Tuesdays, 8:00 a.m., ACRC Betsy Blass Conf.

Surgery Morbidity & Mortality Conference, Tuesdays, 7:00 a.m., ACRC Betsy Blass conference room, 2nd floor

NLRVA Geriatric/Medicine Grand Rounds, Thursdays, 8:00 a.m., VAMC-NLR, Bldg 68, room 130

VA Medical Service Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D109

VA Pathology-Hematology/Oncology-Radiology Patient Problem Conference, Thursdays, 8:15 a.m., VAMC-LR, room 2E142

VA Psychiatry Difficult Case Conference, 4th Monday, 12:00 noon, VAMC-NLR, Mental Health Clinic

VA Lung Cancer Conference, Thursdays, 3:00 p.m., VAMC-LR, room 2E142

VA Medical Service Teaching Conference, Thursdays, 8:00 a.m., VAMC-NLR, Bldg. 68 room 130

VA Medicine-Pathology Conference, Tuesday, 2:00 p.m., VAMC-LR, room 2D109

VA Medicine Resident's Clinical Case Conference, Fridays, 12:00 noon, VAMC-LR, room 2D08

VA Physical Medicine & Rehab Grand Rounds, 4th Friday, 11:30 a.m., VAMC-NLR Bldg. 68, room 118 or Baptist Rehab Institute

VA Surgery Grand Rounds, Thursdays, 12:45 p.m., VAMC-LR, room 2D109, 1.25 credit hours

VA Topics in Rehabilitation Medicine Conference, 2nd, 3rd, & 4th Thursdays, 8:00 a.m., VAMC-NLR Bldg. 68, room 118

VA Weekly Cancer Conference, Monday, 3:00 p.m., VAMC-LR, room 2E-142

White County Memorial Hospital Medical Staff Program, once monthly, dates & times vary, White County Memorial Hospital, Searcy

EL DORADO-AHEC

Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., Warner Brown Campus, 6th floor Conf. Rm.

Behavioral Sciences Conference, 1st & 4th Friday, 12:15 p.m., AHEC - South Arkansas

Chest Conference, 3rd Wednesday, 12:15 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.

Dermatology Conference, 1st Tuesdays and 1st Thursdays, AHEC - South Arkansas

GYN Conference, 2nd Friday, 12:15 p.m., AHEC-South Arkansas

Internal Medicine Conference, 1st, 2nd & 4th Wednesday, 12:15 p.m., AHEC-South Arkansas

Noon Lecture Series, 2nd & 4th Thursday, 12:00 noon, Union Medical Campus, Conf. Rm. #3. Lunch provided.

Obstetrics-Gynecology Conference, 4th Thursday, 12:15 p.m., AHEC - South Arkansas

Pathology Conference, 2nd Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5. Lunch provided.

Pediatric Conference, 3rd Friday, 12:15 p.m., AHEC - South Arkansas

Pediatric Case Presentation, 3rd Tuesday, 3rd Friday, AHEC - South Arkansas

Surgical Conference, 1st, 2nd & 3rd Monday, 12:15 p.m., AHEC - South Arkansas

Tumor Clinic, 4th Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5, Lunch provided.

VA Hematology/Oncology Conference, Thursdays, 8:15 a.m., VAMC-LR Pathology conference room 2E142

FAYETTEVILLE-AHEC NORTHWEST

AHEC Teaching Conferences, Tuesdays & Wednesdays, 12:00 noon, AHEC Classroom

AHEC Teaching Conferences, Fridays, 12:00 noon, AHEC Classroom

AHEC Teaching Conferences, Thursdays, 7:30 a.m., AHEC Classroom

Medical/Surgical Conference Series, 4th Tuesday, 12:30, Bates Medical Center, Bentonville

FORT SMITH-AHEC

Grand Rounds, 12:00 noon, first Wednesday of each month, Sparks Regional Medical Center

Neuroradiology Conference, 1st Tuesday of each month, 12:00 noon, Sparks Regional Medical Center, 7th floor dining room

Neuroscience & Spine Conference, 3rd Wednesday each month, 12:00 noon, St. Edward Mercy Medical Center

Tumor Conference, Mondays, 12:00 noon, St. Edward Mercy Medical Center

Tumor Conference, Wednesdays, 12:00 noon, Sparks Regional Medical Center

JONESBORO-AHEC NORTHEAST

AHEC Lecture Series, 1st & 3rd Tuesday, 12:00 noon, Stroud Hall, St. Bernard's Regional Medical Center. Lunch provided.
Arkansas Methodist Hospital CME Conference, 7:30 a.m., Hospital Cafeteria, Arkansas Methodist Hospital, Paragould
Chest Conference, 2nd Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Citywide Cardiology Conference, 3rd Thursday, 7:30 p.m., Jonesboro Holiday Inn
Clinical Faculty Conference, 5th Tuesday, St. Bernard's Regional Medical Center, Dietary Conference Room, lunch provided
Craighead/Poinsett Medical Society, 1st Tuesday, 7:00 p.m. Jonesboro Country Club
Greenleaf Hospital CME Conference, monthly, 12:00 noon, Greenleaf Hospital Conference Room. Lunch provided.
Independence County Medical Society, 2nd Tuesday, 6:30 p.m., Batesville Country Club, Batesville
Interesting Case Conference, 4th Tuesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Jackson County Medical Society, 3rd Thursday, 7:00 p.m., Newport Country Club, Newport
Kennett CME Conference, 3rd Monday, 12:00 noon, Twin Rivers Hospital Cafeteria, Kennett, MO
Methodist Hospital of Jonesboro Cardiology Conference, every other month, 7:00 p.m., alternating between Methodist Hospital Conference Room and St. Bernard's, Stroud Hall. Meal provided.
Methodist Hospital of Jonesboro CME Conference, 2nd Tuesday, 7:00 p.m., Cafeteria, Methodist Hospital of Jonesboro
Neuroscience Conference, 3rd Monday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch Provided.
Orthopedic Case Conferences, every other month beginning in January, 7:30 a.m., Northeast Arkansas Rehabilitation Hospital
Perinatal Conference, 2nd Wednesday, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Piggott CME Conference, 3rd Thursday, 6:00 p.m., Piggott Hospital. Meal provided.
Pocahontas CME Conference, 3rd Wednesday, 12:00 noon & 7:30 p.m., Randolph County Medical Center Boardroom
Tumor Conference, Thursdays, 12:00 noon, St. Bernard's Dietary Conference Room. Lunch provided.
Walnut Ridge CME Conference, 3rd & last Tuesday, 12:00 noon, Lawrence Memorial Hospital Cafeteria
White River CME Conference, 3rd Thursday, 12:00 noon, White River Medical Center Hospital Boardroom

PINE BLUFF-AHEC

Behavioral Science Conference, 1st & 3rd Thursday, 12:00 noon, Jefferson Regional Medical Center
Chest Conference, 2nd & 4th Friday, 12:00 noon, Jefferson Regional Medical Center
FP Journal Club, 2nd Monday, 12:00 noon, Jefferson Regional Medical Center
Internal Medicine Conference, 2nd & 4th Thursdays, 12:00 noon, Jefferson Regional Medical Center
Obstetrics/Gynecology Conference, 2nd Tuesday, 12:00 noon, Jefferson Regional Medical Center
Orthopedic Case Conference, 2nd & 4th Wednesdays, 12:00 noon, Jefferson Regional Medical Center.
Pediatric Conference, 3rd Wednesday, 12:00 noon, Jefferson Regional Medical Center
Radiology Conference, 3rd Tuesday, 12:00 noon, Jefferson Regional Medical Center
Southeast Arkansas Medical Lecture Series, 4th Tuesday, 6:30 p.m., Locations vary. Dinner meeting.
Tumor Conference, 1st Wednesday & 3rd Friday, 12:00 noon, Jefferson Regional Medical Center

TEXARKANA-AHEC SOUTHWEST

Chest Conference, every other 3rd Tuesday/quarterly, 12:00 noon, St. Michael Health Care Center
Neuro-Radiology Conference, 1st Thursday every month at St. Michael Health Care Center and 3rd Thursday of every month at Wadley Regional Medical Center, 12:00 noon.
Residency Noon Conference, Monday, Wednesday, Thursday, Friday each week, alternates between St. Michael Health Care Center & Wadley Regional Medical Center
Tumor Board, Fridays, except 5th Friday, 12:00 noon, Wadley Regional Medical Center & St. Michael Hospital
Tumor Conference, every 5th Friday, 12:00 noon alternates between Wadley Regional Medical Center & St. Michael Hospital



Continuing Medical Education Contacts:

*The following is a list of telephone numbers physicians
can call for more information on CME activities*

Little Rock
Arkansas Medical Society
501-224-8967

Fayetteville
VA Medical Center
501-444-5050

Fayetteville
Washington Regional
Medical Center
501-442-1823

Harrison
North Arkansas
Medical Center
870-365-2098

Hot Springs
National Park
Medical Center
501-620-1420

Hot Springs
St. Joseph's Regional
Health Center
501-622-1024

Little Rock
St. Vincent Infirmary
Medical Center
501-660-3592
or 501-660-3594

Little Rock
Baptist Medical Center
501-202-2673

Mountain Home
Baxter County
Regional Hospital
870-424-1760

Little Rock
Arkansas Children's
Hospital
501-320-1248

Little Rock
UAMS
501-661-7962

El Dorado
AHEC
870-862-2489

Fayetteville
AHEC
501-521-8260

Fort Smith
AHEC
501-785-2431

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870-972-0063

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All manuscripts should be submitted to Tina G. Wade, Managing Editor, Arkansas Medical Society, P.O. Box 55088, Little Rock, Arkansas 72215-5088. A transmittal letter should accompany the article and should identify one author as the correspondent and include his/her address and telephone number.

MANUSCRIPT STYLE

Author information should include titles, degrees, and any hospital or university appointments of the author(s). All scientific manuscripts must include an abstract of not more than 100 words. The abstract is a factual summary of the work and precedes the article. Manuscripts should be typewritten, double-spaced, and have generous margins. Subheads are strongly encouraged. The original and one copy should be submitted. Pages should be numbered. Manuscripts are not returned; however, original photographs or drawings will be returned upon request after publication. Manuscripts should be no longer than ten typewritten pages. Exceptions will be made only under most unusual circumstances.

REFERENCES

References should be limited to ten; if more than ten are listed, the author(s) may designate the ten most significant to be printed and readers will be referred to the authors(s) for the complete list. References must contain, in the order given: name of author(s), title of article, name of periodicals with volume, page, month and year. References should be numbered consecutively in the order in which they appear in the text. Authors are responsible for reference accuracy.

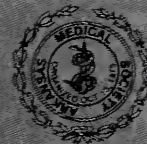
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Volume 95 Number 9

February 1999

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ARKANSAS MEDICAL SOCIETY

123RD ANNUAL SESSION



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APRIL 29 - MAY 1, 1999

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Cover photo, courtesy of the Arkansas Department of Parks and Tourism. This photo was taken by A. C. Haralson.

Upon his Shoulders I will Stand

Alex Finkbeiner, M.D.*

My first interaction with him was 24 years ago through a letter he sent in response to my letter of application for an academic position in urology. His response was at once folksy, concise, enthusiastic, and seductive; seducing this Michigander raised in winter climes by casually mentioning that it was not unusual to rake leaves in a tee-shirt on New Year's Day in Arkansas. The subsequent recruiting process followed the same genre. He stressed not only the infrastructure and resources extant to assist me in advancing my academic career, but also his vision of how the unlimited potential for the academic medical community in Arkansas could be fulfilled not only for us individually but for UAMS as a whole. We have been friends and colleagues for over 23 years and he has fulfilled every promise made to me.

In academia, score is kept by the content of one's curriculum vitae: papers published, committees served, grants obtained, classes taught, awards and honors bestowed. A perusal of his curriculum vitae reveals a stellar academic score card: AOA, Distinguished Faculty Award, President of Arkansas Urologic Society, President of Southern Medical Association, Secretary of South Central Section American Urologic Association, Jaycees Outstanding Young Man of the Year, Professor and Chairman, member of 27 medical societies, publication of 251 articles, and 33 visiting professorships and guest lectureships. Although his curriculum vitae is a testimony to an outstanding successful academic career, I submit there is a better and more lasting scorecard upon which to measure his legacy. His is a legacy of building an academic urology program; teaching and mentoring medical students, residents, nurses and graduate physicians; providing superb medical and surgical care, particularly in the pediatric age group and hiring and mentoring first-class academic urologists. Above all else he stressed honesty and integrity while conveying to all of us an enthusiasm and passion for his vocation.

He has now attained a deserved peace through his God and now by resigning as Chairman of the Department of Urology at UAMS. He will, however, stay on the staff continuing his teaching, patient care, prolific writing, and cheerleading.

Toward the end of his career, in response to all the accolades accorded him, Galileo Galilei, the Italian physicist and astronomer said; "If I have been so fortunate to see further than others, it is because I have had the privilege of standing on the shoulders of giants who have preceded me."

As I assume the Chair of Urology at UAMS it is upon the shoulders of John Fletcher Redman, M.D. that I will stand.

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* Dr. Finkbeiner is Chairman of the Department of Urology at the University of Arkansas for Medical Sciences (UAMS). He is a member of the editorial board for *The Journal of the Arkansas Medical Society*.

Medicine in the News

Arkansas Health Care Access Foundation

As of January 1, 1999, the Arkansas Health Care Access Foundation has provided free medical service to 14,892 medically indigent persons, received 28,142 applications and enrolled 54,505 persons. This program has 1,929 volunteer health care professionals including medical doctors, dentists, hospitals, home health agencies and pharmacists. These providers have rendered free treatment in 69 of the 75 counties. For more information on this program, please call 800-950-8233 or 501-221-3033.

Arkansas Hospitals Respond to Threat of Antibiotic-Resistant Bacteria

December 29, 1998 - Arkansas hospitals are not surprised by reports that antibiotic resistance has become one of the most dangerous threats to public health. In response to early CDC reports concerning the growing threat of antibiotic-resistant organisms in U.S. hospitals, Arkansas Foundation for Medical Care (AFMC) launched a project in 1996 designed to boost hospitals' abilities to proactively target antibiotic resistance. As a result, 69 Arkansas hospitals have responded with new policies that now strategically position them to detect, report and ultimately prevent the spread of antibiotic-resistant bacteria.

Bacteria acquired primarily in hospitals account for two million infections and 90,000 deaths each year in the U.S. Most of these infections, caused by strains of enterococcus and staphylococcus, are routinely treated with antibiotics. But even when the usual drugs stopped working, a dose of the powerful antibiotic vancomycin was, until recently, a reliable last resort.

Only now, instead of falling prey to once-formidable vancomycin, a few resilient bugs are fighting back. One strain of enterococcus, which lives in the intestinal tract of humans and animals, has recently developed vancomycin resistance. In hospital emergency rooms, intensive care units and nurseries, vancomycin-resistant enterococcus (VRE) infections can be deadly for weak patients.

More alarming still is VRE's ability to pass its resistance to other organisms, particularly the deadly staphylococcus aureus (*S. aureus*), the leading cause of hospital-acquired (nosocomial) infections. Until recently, *S. aureus* and similarly stubborn bugs that had refused to succumb to other antibiotics were vulnerable to vancomycin. These bacterias are now defeating vancomycin.

In 1996, AFMC reported to Arkansas hospitals the serious threat posed by the potential spread of vanco-

mycin resistant organisms and advocated adoption of procedures to reduce the potential for antibiotic resistance. Within 90 days, 50 hospitals enthusiastically embraced the opportunity to fend off antibiotic resistance in their facilities. To date, 69 hospitals have collaborated with AFMC on this quality improvement project, resulting in a dramatic statewide increase in CDC VRE guideline observance by 400 - 700 percent.

- 50% (up from 9%) of participating hospitals now routinely screen organisms for resistance to vancomycin.
- 59% (up from 10.3%) revised their facility's protocol for reporting of vancomycin resistance to state health authorities.
- 73.1% (up from 10.3%) have isolation procedures for patients infected with or carrying resistant organisms.
- 47.4% (up from 7.7%) have revised policies curtailing the routine use of vancomycin as a safeguard against surgical infection.

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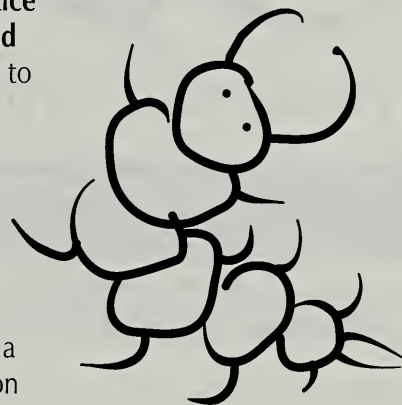
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National Regional for Northwest Hospital's VRE Plan

One Arkansas hospital recently gained recognition from Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) for its work with AFMC on this project. St. Mary's - Rogers Memorial Hospital in Rogers, Arkansas developed an extensive VRE plan to enact CDC guidelines as recommended by AFMC. As part of its plan, the hospital's VRE team developed a training manual that has since been adopted for use by the Arkansas Department of Health and hospitals throughout the U.S.

New AFMC Projects Fight Antibiotic Resistance

AFMC continues to seek out opportunities to combat the growing threat of antibiotic-resistant bacteria. AFMC recently targeted a reduction in routine vancomycin usage by encouraging physicians to use a more

appropriate drug to treat pseudomembranous colitis (p.colitis), a common gastrointestinal dysfunction. Because routine vancomycin treatment for p. colitis fosters the development of vancomycin resistant enterococci (VRE), AFMC's project has prompted a more careful approach to diagnosis and antibiotic treatment of p. colitis as yet another way to combat antibiotic resistance statewide.

AFMC is also creating a campaign to increase the use of pneumococcal vaccine, or the pneumonia shot, which could be an important method of combating resistant pneumococcus, a growing threat in many communities. For more information, please call 800-272-5528, extension 204.

Information provided by News Release from AFMC

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AMS Newsmakers

Dr. Cole Goodman, an independent plastic surgeon in Fort Smith has been chosen once again by his peers to be listed in "The Best Doctors in America for 1999."

Goodman also was listed in the book 'The Best Doctors in America Central Region 1996-97. He is president-elect for 1998-1999 of the Southeastern Society of Plastic and Reconstructive Surgeons and was elected Fort Smith City director, Ward 4.

Dr. James Suen, was presented with the Twenty-fifth annual Chinese Hospital award for the national Chinese-American Doctor of the year on Friday, October 23, 1998, in San Francisco, CA.

Dr. Suen is currently Professor and Chairman of

the Department of Otolaryngology, UAMS and Director of Clinical Affairs at Arkansas Cancer Research Center.

After serving the Dermott community for 53 years, **Dr. H.W. Thomas** has retired from his medical practice.

A reception honoring Dr. Thomas for his 53 years of service in Dermott was held at the United Methodist Church.

Dr. Narayaswami "Ranga" Rangaswami has been named the state's top pediatrician by Arkansas Business, a magazine devoted to the varied aspects of business development in the state.

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**You can now E-mail AMS
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The directories are \$50 each. For orders of 2 to 10,
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THIS SPECIAL FRAUD ALERT, ISSUED BY THE OFFICE OF THE INSPECTOR GENERAL, IS BEING PRESENTED IN THE JOURNAL TO EDUCATE PHYSICIANS ON HOW TO ASSIST IN THE DETECTION AND PREVENTION OF FRAUDULENT ACTIVITIES IN THE MEDICARE PROGRAM.

SPECIAL FRAUD ALERT

PHYSICIAN LIABILITY FOR CERTIFICATIONS IN THE PROVISION OF MEDICAL EQUIPMENT AND SUPPLIES AND HOME HEALTH SERVICES

January 1999

The Office of Inspector General (OIG) was established at the Department of Health and Human Services by Congress in 1976 to identify and eliminate fraud, waste, and abuse in the Department's programs and to promote efficiency and economy in departmental operations. The OIG carries out this mission through a nationwide program of audits, inspections, and investigations.

To reduce fraud and abuse in the Federal health care programs, including Medicare and Medicaid, the OIG actively investigates fraudulent schemes that obtain money from these programs and, when appropriate, issues Special Fraud Alerts that identify segments of the health care industry that are particularly vulnerable to abuse. **Copies of all OIG Special Fraud Alerts are available on the internet at: <http://www.dhhs.gov/progorg/oig/frdalrt/index.htm>**

We are issuing this Fraud Alert because physicians may not appreciate the legal and programmatic significance of certifications they make in connection with the ordering of certain items and services for their Medicare patients. While the OIG believes that the actual incidence of physicians' intentionally submitting false or misleading certifications of medical necessity for durable medical equipment or home health care is relatively infrequent, physician laxity in reviewing and completing these certifications contributes to fraudulent and abusive practices by unscrupulous suppliers and home health providers. We urge physicians and their staff to report any suspicious activity in connection with the solicitation or completion of certifications to the OIG.

Physicians should also be aware that they are subject to substantial criminal, civil, and administrative penalties if they sign a certification knowing that the information relating to medical necessity is false, or with reckless disregard as to the truth of the information being submitted. While a physician's signature on a false

or misleading certification made through mistake, simple negligence, or inadvertence will not result in personal liability, the physician may unwittingly be facilitating the perpetration of fraud on Medicare by suppliers or providers. Accordingly, we urge all physicians to review and familiarize themselves with the information in this Fraud Alert. **If a physician has any questions as to the application of these requirements to specific facts, the physician should contact the appropriate Medicare Fiscal Intermediary or Carrier.**

THE IMPORTANCE OF PHYSICIAN CERTIFICATION FOR MEDICARE

The Medicare program only pays for health care services that are medically necessary. In determining what services are medically necessary, Medicare primarily relies on the professional judgment of the beneficiary's treating physician, since he or she knows the patient's history and makes critical decisions, such as admitting the patient to the hospital; ordering tests, drugs, and treatments; and determining the length of treatment. In other words, the physician has a key role in determining both the medical need for, and utilization of, many health care services, including those furnished and billed by other providers and suppliers.

Congress has conditioned payment for many Medicare items and services on a certification signed by a physician attesting that the item or service is medically necessary. For example, physicians are routinely required to certify to the medical necessity for any service for which they submit bills to the Medicare program.

Physicians also are involved in attesting to medical necessity when ordering services or supplies that must be billed and provided by an independent supplier or provider. Medicare requires physicians to certify to the medical necessity for many of these items and services through prescriptions, orders, or, in certain specific circumstances, Certificates of Medical Necessity (CMNs).

These documentation requirements substantiate that the physician has reviewed the patient's condition and has determined that services or supplies are medically necessary.

Two areas where the documentation of medical necessity by physician certification plays a key role are (i) home health services and (ii) durable medical equipment (DME). Through various OIG audits, we have discovered that physicians sometimes fail to discharge their responsibility to assess their patients' conditions and need for home health care. Similarly, the OIG has found numerous examples of physicians who have ordered DME or signed CMNs for DME without reviewing the medical necessity for the item or even knowing the patient.

PHYSICIAN CERTIFICATION FOR HOME HEALTH SERVICES

Medicare will pay a Medicare-certified home health agency for home health care provided under a physician's plan of care to a patient confined to the home. Covered services may include skilled nursing services, home health aide services, physical and occupational therapy and speech language pathology, medical social services, medical supplies (other than drugs and biologicals), and DME.

As a condition for payment, Medicare requires a patient's treating physician to certify initially and recertify at least every 62 days (2 months) that:

- the patient is confined to the home;
- the individual needs or needed (i) intermittent skilled nursing care; (ii) speech or physical therapy or speech-language pathology services; or (iii) occupational therapy or a continued need for occupational therapy (payment for occupational therapy will be made only upon an initial certification that includes care under (i) or (ii) or a recertification where the initial certification included care under (i) or (ii));
- a plan of care has been established and periodically reviewed by the physician; and
- the services are (were) furnished while the patient is (was) under the care of a physician.

The physician must order the home health services, either orally or in writing, prior to the services being furnished. The physician certification must be obtained at the time the plan of treatment is established or as soon thereafter as possible. The physician certification must be signed and dated prior to the submission of the claim to Medicare. If a physician has any questions as to the application of these requirements to specific facts, the physician should contact the appropriate Medicare Fiscal Intermediary or Carrier.

PHYSICIAN ORDERS, CERTIFICATES OF MEDICAL NECESSITY FOR DURABLE MEDICAL EQUIPMENT, PROSTHETICS, ORTHOTICS, AND SUPPLIES FOR HOME USE

DME is equipment that can withstand repeated use, is primarily used for a medical purpose, and is not generally used in the absence of illness or injury. Examples include hospital beds, wheelchairs, and oxygen delivery systems. Medicare will cover medical supplies that are necessary for the effective use of DME, as well as surgical dressings, catheters, and ostomy bags. However, Medicare will only cover DME and supplies that have been ordered or prescribed by a physician. The order or prescription must be personally signed and dated by the patient's treating physician.

DME suppliers that submit bills to Medicare are required to maintain the physician's original written order or prescription in their files. The order or prescription must include:

- the beneficiary's name and full address;
- the physician's signature;
- the date the physician signed the prescription or order;
- a description of the items needed;
- the start date of the order (if appropriate); and
- the diagnosis (if required by Medicare program policies) and a realistic estimate of the total length of time the equipment will be needed (in months or years).

For certain items or supplies, including supplies provided on a periodic basis and drugs, additional information may be required. For supplies provided on a periodic basis, appropriate information on the quantity used, the frequency of change, and the duration of need should be included. If drugs are included in the order, the dosage, frequency of administration, and, if applicable, the duration of infusion and concentration should be included.

Medicare further requires claims for payment for certain kinds of DME to be accompanied by a CMN signed by a treating physician (unless the DME is prescribed as part of a plan of care for home health services). When a CMN is required, the provider or supplier must keep the CMN containing the treating physician's original signature and date on file.

Generally, a CMN has four sections:

- Section A contains general information on the patient, supplier, and physician.
- **Section A may be completed by the supplier.**
- Section B contains the medical necessity justification for DME. This cannot be filled out by the supplier. **Section B must be completed by the physician, a non physician clinician involved**

in the care of the patient, or a physician employee. If the physician did not personally complete section B, the name of the person who did complete section B and his or her title and employer must be specified.

- Section C contains a description of the equipment and its cost. **Section C is completed by the supplier.**
- Section D is the treating physician's attestation and signature, which certifies that the physician has reviewed sections A, B, and C of the CMN and that the information in section B is true, accurate,, and complete. **Section D must be signed by the treating physician.** Signature stamps and date stamps are not acceptable.

By signing the CMN, the physician represents that:

- he or she is the patient's treating physician and the information regarding the physician's address and unique physician identification number (UPIN) is correct;
- the entire CMN, including the sections filled out by the supplier, was completed **prior** to the physician's signature; and
- the information in section B relating to medical necessity is true, accurate, and complete to the best of the physician's knowledge.

IMPROPER PHYSICIAN CERTIFICATIONS FOSTER FRAUD

Unscrupulous suppliers and providers may steer physicians into signing or authorizing improper certifications of medical necessity. In some instances, the certification forms or statements are completed by DME suppliers or home health agencies and presented to the physician, who then signs the forms without verifying the actual need for the items or services. In many cases, the physician may obtain no personal benefit when signing these unverified orders and is only accommodating the supplier or provider. While a physician's signature on a false or misleading certification made through mistake, simple negligence, or inadvertence will not result in personal liability, the physician may unwittingly be facilitating the perpetration of fraud on Medicare by suppliers or providers. When the physician knows the information is false or acts with reckless disregard as to the truth of the statement, such physician risks criminal, civil, and administrative penalties.

Sometimes, a physician may receive compensation in exchange for his or her signature. Compensation can take the form of cash payments, free goods, or any other thing of value. Such cases may trigger additional criminal and civil penalties under the antikickback statute.

The following are examples of inappropriate certifications uncovered by the OIG in the course of its inves-

tigations of fraud in the provision of home health services and medical equipment and supplies:

- A physician knowingly signs a number of forms provided by a home health agency that falsely represent that skilled nursing services are medically necessary in order to qualify the patient for home health services.
- A physician certifies that a patient is confined to the home and qualifies for home health services, even though the patient tells the physician that her only restrictions are due to arthritis in her hands, and she has no restrictions on her routine activities, such as grocery shopping.
- At the prompting of a DME supplier, a physician signs a stack of blank CMNs for transcutaneous electrical nerve stimulators (TENS) units. The CMNs are later completed with false information in support of fraudulent claims for the equipment. The false information purports to show that the physician ordered and certified to the medical necessity for the TENS units for which the supplier has submitted claims.
- A physician signs CMNs for respiratory medical equipment falsely representing that the equipment was medically necessary.
- A physician signs CMNs for wheelchairs and hospital beds without seeing the patients, then falsifies his medical charts to indicate that he treated them.
- A physician accepts anywhere from \$50 to \$400 from a DME supplier for each prescription he signs for oxygen concentrators and nebulizers.

POTENTIAL CONSEQUENCES FOR UNLAWFUL ACTS

A physician is not personally liable for erroneous claims due to mistakes, inadvertence, or simple negligence. However, knowingly signing a false or misleading certification or signing with reckless disregard for the truth can lead to serious criminal, civil, and administrative penalties including:

- criminal prosecution;
- fines as high as \$ 10,000 per false claim plus treble damages; or
- administrative sanctions including: exclusion from participation in Federal health care programs, withholding or recovery of payments, and loss of license or disciplinary actions by state regulatory agencies.

Physicians may violate these laws when, for example:

- they sign a certification as a "courtesy" to a patient, service provider, or DME supplier when they have not first made a determination of medical necessity;

- they knowingly or recklessly sign a false or misleading certification that causes a false claim to be submitted to a Federal health care program; or
- they receive any financial benefit for signing the certification (including free or reduced rent,

patient referrals, supplies, equipment, or free labor).

Even if they do not receive any financial or other benefit from providers or suppliers, physicians may be liable for making false or misleading certifications.

WHAT TO DO IF YOU HAVE INFORMATION ABOUT FRAUD AND ABUSE AGAINST MEDICARE OR MEDICAID PROGRAMS

If you have information about physicians, home health agencies, or medical equipment and supply companies engaging in any of the activities described above, contact any of the regional offices of the Office of Investigations of the Office of Inspector General, U.S. Department of Health and Human Services, at the following locations:

Field Offices	States Served	Telephone Number
Boston	MA, VT, NH, ME, RI, CT	617-565-2664
New York	NY, NJ, PR, VI	212-264-1691
Philadelphia	VA, DC, PA, MD, DE, WV	215-861-4586
Atlanta	GA, KY, NC, SC, FL, TN, AL, MS	404-562-7603
Chicago	IL, NW, WI, MI, IN, OH, IA, MO	312-353-2740
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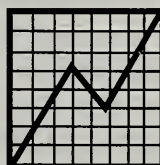
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A Review of the Adverse Effects of Cisapride

Don Gibson, M.D.*

Cisapride (Propulsid) is a gastrointestinal prokinetic agent that stimulates motility throughout the gastrointestinal tract. It is used for symptomatic treatment of gastroesophageal reflux disease and gastroparesis. The agent is believed to stimulate motility through agonism of serotonin 5-HT₄ receptors in bowel. Through this mechanism Cisapride improves symptoms in patients with decreased gastric emptying, small intestinal pseudo-obstruction, or colonic inertia. The drug is effective when used for the above reasons, however many physicians have noted increased complications and adverse effects, sometimes fatal, when using this agent.

Cisapride is available for oral use in 10 and 20 milligram tablets and as a suspension in a concentration of 1 mg/ml. *In vitro* studies have shown that Cisapride is a serotonin-4 receptor agonist. The agonistic action results in increased gastrointestinal motility and small increases in cardiac rate. Cisapride is rapidly absorbed after oral administration and peak plasma concentrations are reached 1 to 1.5 hours after dosing. Cisapride binds to an extent of 98% to plasma proteins, mainly albumin. The mean terminal half life ranges from 6 to 12 hours. It is important to note that ninety percent of available Cisapride is metabolized by the cytochrome P450-3A4 enzyme.

The purpose of this article is to review some of the commonly reported adverse effects that have been observed with the usage of Cisapride. The most organized way of approaching this is through a systematic approach.

Cardiovascular: The first listing in the 1998 PDR for Cisapride is a "black box" warning which is as follows; Warning: Serious cardiac arrhythmias including ventricular tachycardia, ventricular fibrillation, torsades de pointes, and QT prolongation have been reported in patients taking Cisapride (Propulsid) with other drugs that inhibit cytochrome P450-3A4, such as Ketoconazole, Itraconazole, Miconazole, Troleandomycin, Erythromycin,

Fluconazole and Clarithromycin. Some of these events have been fatal. Cisapride is contraindicated in patients taking any of these drugs.

One early indicator of the cardiotoxicity of Cisapride was noted when intravenous administration of the agent caused tachycardia. It should be noted that the intravenous formulation of Cisapride is not available in the United States. At that time, it was theorized that antagonism of the sinoatrial 5-HT₄ receptors by Cisapride was responsible for the tachycardia (Bateman, 1986). As can be imagined this report was highly controversial and a large survey, involving more than 13,000 patients taking oral Cisapride did not demonstrate a significantly increased incidence of tachycardia or arrhythmias (Inman & Kubota, 1992). However, the USFDA's Adverse Drug Experience Reporting System received 18 reports of ventricular arrhythmias associated with oral Cisapride between September 1993, when the drug was marketed in the United States, and January 1995. These cases include 12 cases of torsades de pointes. The majority of patients who developed these arrhythmias were also receiving other drugs, were chronically ill, or had other cardiovascular risk factors. Two patients who developed torsades were using Cisapride in combination with the antifungal agent Ketoconazole. Human pharmacokinetic data indicate that oral Ketoconazole potentially inhibits the metabolism of Cisapride resulting in a mean eight-fold increase in area under the concentration-time curve (AUC) of Cisapride. A follow up study of 14 healthy male and female volunteers suggested that coadministration of Cisapride and Ketoconazole can result in prolongation to the QT interval on the ECG. Elevated blood Cisapride levels were noted at the time of the QT prolongation and normalization of the QT interval after Cisapride was discontinued was observed (Rizwanuddin & Wolf, 1995). The exact mechanism of QT prolongation is technically unknown but there is convincing evidence that a raised Cisapride level is due to competitive inhibition of the cytochrome P450-3A4 enzyme by competing agents. This

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most likely is responsible for the increased concentration of Cisapride, which results in QT prolongation, which increases the risks of arrhythmias. In light of this data it must be stressed that before initiating therapy with Cisapride physicians must be cognizant of their patient's electrocardiogram, especially the QT interval, and be aware of any drugs that may prolong the QT interval or inhibit the function of the cytochrome P450-3A4 enzyme.

CENTRAL NERVOUS SYSTEM: In clinical trials Cisapride has demonstrated few adverse neurological effects. Dizziness, headache and sleep disturbances have been reported occasionally in patients receiving Cisapride (Rosch, 1987). A small number of seizures have been reported in patients with a complex medical history; however a causal relationship to Cisapride is unlikely. On the other hand, somnolence and fatigue occur much less frequently with Cisapride (1.6%) than with sister agent Metoclopramide, a dopamine antagonist (15.2%) (McCallum, 1988).

ENDOCRINE: In patients with insulin-dependent diabetes, Cisapride has been shown to have no effect on glycemic control. Therefore the agent is considered safe in patients with diabetes but one must consider other compounding factors for coronary artery disease. (Horowitz, 1987).

GASTROINTESTINAL: Some patients taking Cisapride have complaints of diarrhea and flatulence and even paradoxical constipation. It has been noted however, that the gastrointestinal side effects appear to be dose related. Patients receiving 20 mg of Cisapride experienced diarrhea, abdominal pain, constipation and flatulence more frequently than patients receiving 10 mg of the drug. It appears that Cisapride has no adverse effect on liver function studies (Bennett, 1989).

KIDNEY/GENITOURINARY: There have been twenty five case reports of urinary frequency associated with Cisapride. Although a causal relationship has not been determined, clinicians should be cognizant of the possible association of Cisapride and urinary frequency (Pillians & Wood, 1994). There have been multiple reports of urinary incontinence that has been observed within 36 hours of starting Cisapride. Symptoms resolved after stopping the agent (Boyd & Rohan, 1994). Cisapride has not proven to be nephrotoxic (Cooper & Bennett, 1987).

RESPIRATORY: Rhinitis (7.3%), sinusitis (3.6%) and coughing (1.5%) have been reported with Cisapride use. Again a direct causal relationship has not been established and the severity of side effects is relatively low. A case report of chest tightness and wheezing has been reported in a brittle asthmatic within 3 hours of 10 mg orally administered Cisapride (Nolan, 1995).

MUSCULOSKELETAL: Overall musculoskeletal effects are rare. Interestingly a case report of a dystonic-

like reaction occurred in a 43 year old female 3 days after starting oral therapy of 10 mg QID. She had increased tone of the sternocleidomastoid bilaterally, with tongue protrusion, and a slow shuffling gait. The patient recovered completely when Cisapride was discontinued (Bucci, 1995). Also a 7 week old infant experienced torticollis when given combined treatment of Cisapride and Trimebutine for esophagitis. The torticollis resolved after discontinuation of the drugs (Dieckmann, 1996). Again no causal effect has been established in these cases and the overall musculoskeletal complication incidence is low.

PREGNANCY: Cisapride is classified as FDA Pregnancy category C by the manufacturer. Pregnancy category C indicates there is uncertain safety in humans; animal studies show an adverse effect and there are no human studies. There have been no studies that indicate that Cisapride has any effect on fertility or reproductive performance.

VARIOUS DRUG INTERACTIONS: In addition to the drug interactions listed above there have been observed alterations in the pharmacokinetics of other drugs when given with Cisapride. It should also be noted that any drug with anticholinergic effects will negate the effects of Cisapride.

Coumadin: Although *in vitro* studies have demonstrated that Cisapride does not alter the protein binding of Coumadin to plasma proteins (McCallum, 1988), the manufacturer reports that coagulation times have increased in patients receiving concurrent anticoagulant and Cisapride. In patients receiving oral anticoagulant therapy with Coumadin, the prothrombin time ratio or INR should be closely monitored with the addition or withdrawal of Cisapride.

Cimetidine: A pharmacokinetics study in 8 healthy subjects demonstrated that Cimetidine significantly increased Cisapride peak plasma concentration ($p = 0.01$). If concurrent use cannot be avoided, select another H₂-antagonist (Ranitidine or Famotidine) that has less potential to alter the pharmacokinetics of Cisapride.

Diazepam: Concomitant administration of these two drugs has resulted in a 17.6% increase in the peak concentration of Diazepam (Bateman, 1986).

Digoxin: When administered concurrently with Digoxin, Cisapride (10 mg) resulted in decreased gastrointestinal absorption of Digoxin. Digoxin AUC concentration was decreased 12%, however this decrease is not considered significant and no change in therapy is suggested (Kirch, 1986).

Lpratropium: Lpratropium is an anticholinergic and as stated above, use of any anticholinergic will negate the effect of Cisapride.

Phenytoin: *In vitro* studies demonstrate that Cisapride does not alter the protein binding of Phenytoin to plasma proteins (McCallum, 1988). Nevertheless, it would be

prudent to monitor Phenytoin plasma levels during concomitant therapy.

In closing Cisapride is a efficacious drug when appropriately indicated and correctly dosed. This review was written to remind physicians that Cisapride when given with multiple drugs in critically ill patients can be lethal. The astute physician can prevent the development of serious cardiac arrhythmias by careful attention to the patient's drug profile and avoidance of drugs that inhibit the cytochrome P450-3A4 enzyme (Ketoconazole, Itraconazole, Miconazole, Troleandomycin, Erythromycin, Fluconazole, Clarithromycin and the protease inhibitor Ritonavir). Physicians should also search for and electrolyte abnormalities and congenital prolonged QT syndrome. In regards to other adverse effects; physicians should be aware that Cisapride does effect the metabolism of other agents and dosing adjustments may be necessary.

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Microsurgical Flaps for Limb Salvage in Children

James C. Yuen, M.D. and Zuliang Feng, M.D.*

Abstract

We evaluated the results of microsurgical flaps for wound coverage in limb salvage cases at Arkansas Children's Hospital. Ages ranged from one to 18 years with a mean of 7.7 years. Sixteen children with soft tissue defect in 18 limbs were reconstructed with 19 free tissue transfer. Only one out of 19 free flaps failed, which necessitated a second free flap, giving an overall initial flap success rate of 95%. One flap developed superficial muscle necrosis, requiring debridement followed staged skin graft. All limbs were successfully salvaged. Our series confirms that microsurgical flap surgery is safe and effective in children, with limb salvage approaching 100 percent.

Introduction

The evolution microvascular surgery has made the management of difficult wounds of the extremity easier. Even with massive wounds, coverage may be feasible because of the microsurgeon's ability to transfer composite tissue from one region of the body to another. In many cases, without adequate soft-tissue coverage, the limb can not be salvaged because of exposed vital structures such as bone, joint, or hardware. When faced with a wound that is not amenable to direct closure or skin grafting, the initial choice is to mobilize a flap of soft-tissue from neighboring areas so that the blood supply remains attached. Occasionally, because of the location and size of the wound, local tissues may not be adequate and the surgeon has to resort to a microsurgical flap (also known as a "free flap"). This necessitates harvesting the composite tissue with its vascular supply detached and then reconnected to recipient vessels in or close to the wound with the aid of the operating microscope. The refinement of microsurgical flap surgery in the 1960's and 1970's has made free flap procedures a common procedure for the reconstructive

surgeon. The initial hurdle in development of this technique revolved around the development proper instrumentation and magnification for proper handling of the tiny arteries and veins of the flaps, which can reach less than 1 mm in diameter.



Figure 1a. A 11 year-old boy sustained a shot gun wound of the right lower extremity with a soft tissue defect of the right lateral ankle and foot. (Pre-op)



Figure 2a. A 7 year-old boy sustained massive soft tissue and ligament loss about his right knee with exposed joint and subsequent infection. (Pre-op)

When dealing with the pediatric patient, one can imagine that the microsurgeon must face a formidable challenge since the vascular structures has to be smaller than their adult counterpart. Harii and Ohamori were the first to report on the free tissue transfer in children's

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limbs.¹ Actually, the success rate for flap viability in most reported series exceeds 93 percent, which is not significantly different than adult.² Over the past four years, we have achieved similar results at Arkansas Children's Hospital. Microsurgical flaps have proven to be a reliable surgical procedure in limb salvage.

Methods and Results

We performed a retrospective review from May 1994 to November 1997, which comprised of 16 children with soft tissue defects of the limbs that were reconstructed with 19 free tissue transfers at Arkansas Children's Hospital, Little Rock, Arkansas. Their ages ranged from one to 18 years (mean 7.7 years). The defects were caused by acute trauma (n=12) and meningococemia (n=7). Three of the defects were in the upper extremity and 16 were in the lower extremity. Table I describes the patient characteristics. The mean follow-up was 20 months (range two months to 38 months). Table II outlines the flaps chosen and results. One out of 19 free flaps failed, which necessitated a second free flap, giving an overall success rate of 95%. There were no incidences of post-operative infection. One flap developed superficial muscle necrosis, requiring a second skin graft over the muscle. All limbs were successfully salvaged.

Discussion

Our series confirms that microsurgical flap surgery is safe and effective, with limb salvage approaching 100 percent. This surgical treatment requires specialized training, equipment, and instruments. Tiny vessels as small as 0.8 mm in diameter were used for five anastomosis. With high power magnification using the operating microscope, microvascular anastomoses can be performed with patency rates exceeding 97 percent. Microsurgical flap surgery requires a committed surgical team because the preoperative, opera-

tive, and post-operative care is demanding. Infected or dirty wounds require intensive wound preparation before definitive coverage. Multiple trips to the operative room for wound cleansing are required in order to control joint, bone, or soft-tissue infection prior to free flap coverage. The time-consuming efforts on the part of the surgical team and the multiple operations the patients have to go through are well worth it each time when a limb is saved.



Figure 1b. Postoperative result after free rectus muscle flap with overlying skin graft. Full range of motion and ambulatory status without gait abnormality are regained.

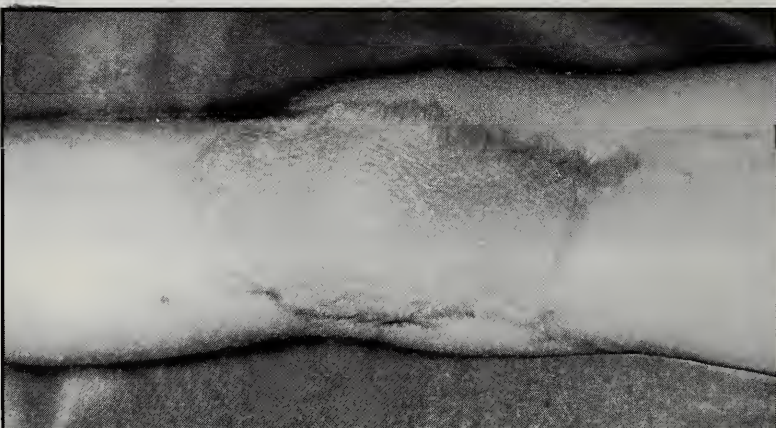


Figure 2b. Postoperative result after free latissimus muscle flap with overlying skin graft. Full range of motion and ambulatory status without gait abnormality are regained.

Table I. Patient Characteristics

Total Limbs	(N=19)
Male	11
Female	8
Age	
Average (years)	7.7
Range (years)	1-18
Diagnosis	
Lower Extremity	16
Open Knee Joint	7
Open Heel	3
Open Ankle Joint	5
Open Tibia	1
Upper Extremity	3
Open Ulna/Elbow	1
Open Forearm	1
Open Hand	1

Table II. Results

Tissue Type (Free Flap)	
Latissimus Muscle	10
Rectus Muscle	6
Scapular Fasciocutaneous	2
Fibular Osteocutaneous	1
History of Preoperative Infection	6 (31.6%)
Postoperative Infection	0 (0%)
Failure Flap	1 (5.2%)
Initial Success	18 (94.8%)
Overall Success	19 (100%)

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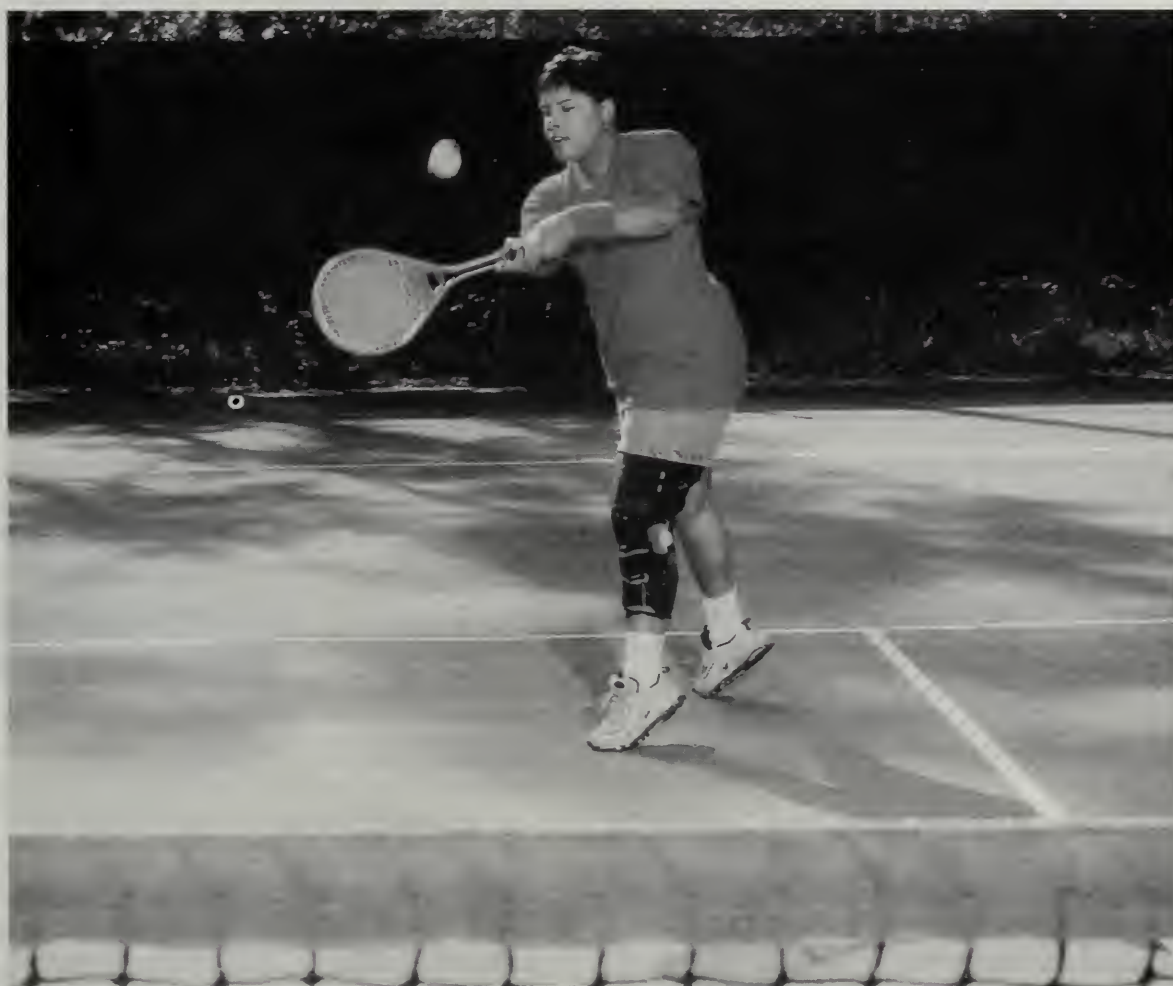
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Not Always Right - Never in Doubt

J. Kelley Avery, M.D.*

Introduction

A 42-year-old woman came to the emergency department (ED) of a rural hospital with a history of chest pain, and at the time of admission she was hyperventilating. She was said to be incoherent when seen by the ED physician. On physical examination, the chest was "clear," cardiovascular examination showed a normal sinus rhythm, and the abdomen was soft. Vital signs were recorded as pulse 98/min and 87/min on two consecutive readings, respirations 24/min, and blood pressure 159/88 mm Hg. Laboratory studies revealed BUN 9 mg/dl, glucose 99 mg/dl, calcium 10.2 mg/dl, sodium 138.7 mEq/L, potassium 3.46 mEq/L, chloride 107.2 mEq/L, CO_2 22.8 mEq/L, BUN/creatinine ratio 10, and the anion gap 12.2. Arterial blood gas determination was reported as pH 7.53, Pco_2 26.1 mm Hg, Po_2 93.1 mm Hg, Hco_3 21.02 mm Hg, and O_2 saturation 98.2.

The EKG was read by the physician as normal sinus rhythm.

The diagnosis was (1) hyperventilation, (2) chest pain, and (3) gastritis. She was given a GI cocktail (contents not recorded) of 30 cc, Tagamet 300 mg four times a day, and "Follow up."

Two and a half days later the patient was seen in the ED by the same physician with the complaint of shortness of breath that began about 30 minutes earlier while the patient was working at her job in a factory cafeteria. She developed some chest pain that seemed to radiate through to her back and felt like "someone stomping on her." She did not have nausea or vomiting, but did report some sweating at the onset of pain. At the time she was seen her skin was warm and dry, her color was good, and she was hyperventilating as she had been on the previous visit. Three times her blood pressure was recorded at 10 minute intervals. It was documented to be 157/107, 100/70, and 141/83. The O_2 saturation was recorded as 94. The doctor recorded that the patient on the

previous visit was "smothering" and that she had to be "lifted from the car." On this occasion the physical examination was recorded as "alert, no acute distress, neck-supple, lungs-clear, cardiovascular-normal sinus rhythm, abdomen-soft, and bowel sounds present."

The cardiac monitor showed no change from the EKG done on the first visit, and arterial blood gas determinations were ordered. The report was pH 7.53, Pco_2 25 mm Hg, Po_2 83 mm Hg, and Hco_3 20.5 mm Hg. An EKG was read by the physician as normal sinus rhythm, and the chest x-ray was read as "No abnormality." Again she was given a "GI cocktail," Vistaril 25 mg IM, and discharged from the ED with the diagnosis of chest pain, recurrent. A stress test was scheduled for three days later in the clinic.

The day before the stress test was to be done she was found by her husband lying on the sidewalk unresponsive and was brought to the ED with CPR in progress. She was pronounced dead a few minutes later.

A lawsuit was instituted within a few months charging the ED physician with failure to recognize and treat signs of myocardial infarction, failure to recognize changes in the EKG, failure to obtain the indicated blood tests, and failure to admit the patient to the hospital for appropriate observation, testing and treatment.

Loss Prevention Comments

The diagnosis of acute myocardial infarction can be a very difficult one to make! Cases like this one happen far too frequently, but when we look at them retrospectively, we learn something every time. There were no significant EKG changes between the first tracing and the second one. Although one of the three readings of the blood pressure was significantly lower than the others on the second visit, one would hardly feel that to be critical to the diagnosis. At the onset of the second attack of "hyperventilation" and chest pain, there was diaphoresis and a change in the description of the character of the pain, "like someone stomping on my chest," which should have indicated the need for more caution in the management of this patient.

* Dr. Avery is Chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Co., Brentwood, TN. This article appeared in the *Journal of the Tennessee Medical Association* in March 1998. It is reprinted here with permission.

One can imagine that this physician was firmly convinced by his first encounter with this patient that her hyperventilation was emotionally induced, associated with some GI condition not related to cardiac disease. The findings on the first visit supported such a conclusion. When the patient was seen again with almost identical symptoms and no essential changes in the physical examination, laboratory findings or chest x-ray, that initial impression was strengthened. Although a stress test was ordered for later, there seemed to be no urgency about this patient's immediate future.

It is hard to believe that the physician would have chosen not to order cardiac enzymes on each of the visits except for the firm conviction that the heart was not

involved in this problem. These blood tests, while not diagnostic, are so routine and expected that it is not standard practice to omit them. Had they been done and the outcome not changed it would have at least shown that the examiner considered the possibility and his actions could have been more easily defended. First impressions are often correct, but it is legal suicide to be so entrenched that we cannot make a course correction as a case develops.

This patient was a good candidate for serial enzymes, EKGs, and observation in the hospital on a cardiac monitor. No expert could be found who thought otherwise, consequently this case had to be settled.



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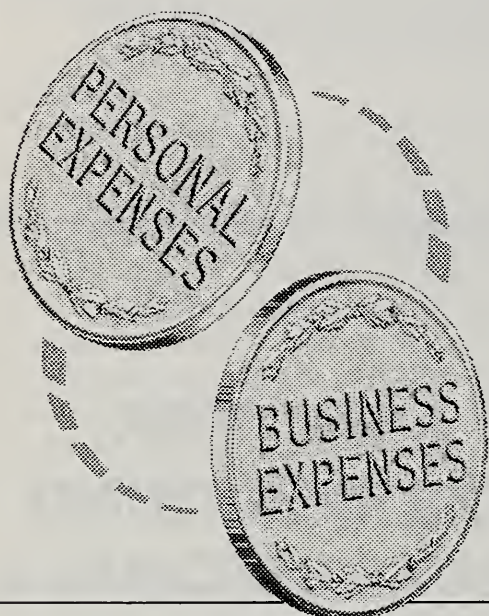
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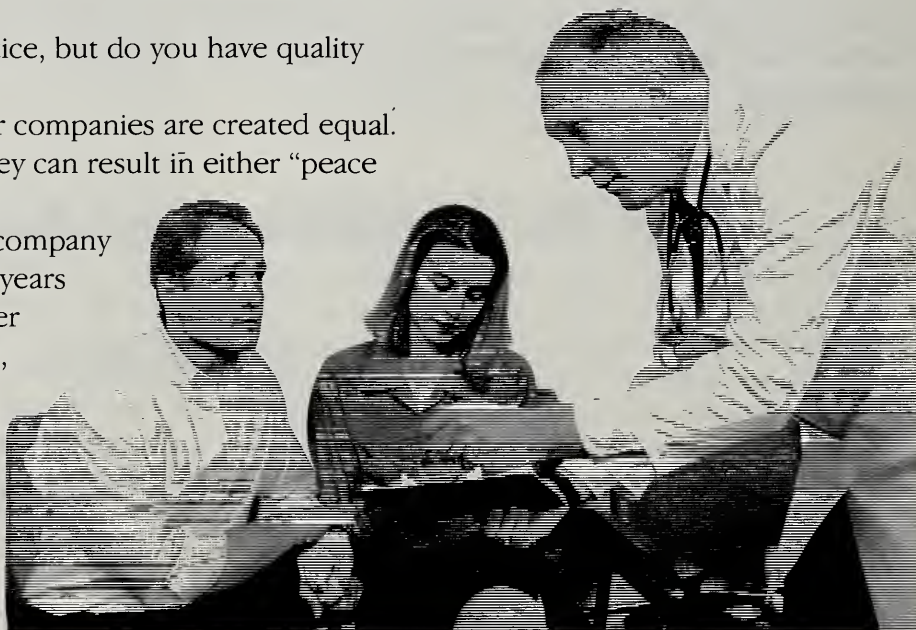
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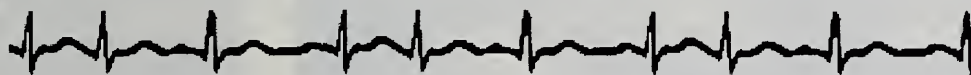
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Cardiology Commentary and Update



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Aortic Regurgitation Secondary to Aortic Dissection

Aortic regurgitation may be due to a disease of the aortic valve, aortic wall, or both. Over the last several decades, an increasing proportion of patients with aortic root disease has increased and now these diseases accounts for more than half of the patients with pure aortic regurgitation requiring valve replacement.¹ We present a patient with severe aortic regurgitation due to an ascending aortic dissection review and discuss diagnostic clues and therapeutic options.

Patient Presentation

A 70 year-old man presented with two weeks history of recurrent substernal chest pain radiating to his back associated shortness of breath. He had systemic arterial hypertension and rheumatoid arthritis for which he was on methotrexate (see Complete Cardiac Diagnosis, Table 1). The blood pressure was 180/70 mmHg. and the pulse was 90/min. The lungs were clear to auscultation bilaterally. The apical impulse was hyperdynamic and was displaced laterally and inferiorly. A systolic thrill was palpable over the base of the heart. There was a grade II/VI decrescendo holodiastolic murmur heard

along the right sternal border. He had prominent pulses in the carotid arteries but no bruits.

The chest x-ray showed widened aortic arch and a

Table 1. Complete Cardiac Diagnosis

Etiology:	Systemic Arterial Hypertension Atherosclerotic coronary artery disease
Anatomy:	Cardiac Catheterization: Left Main: 60% distal, Left Anterior Descending: 90% mid, Left Circumflex: 70% ostial, Right: 100% proximal Ascending aortic dissection
Physiology:	a. Normal Sinus Rhythm b. Transesophageal echocardiography: Severe aortic regurgitation LVEF40%
Functional:	Class III
Objective:	Severe aortic regurgitation and severe coronary artery disease

CT scan revealed an aneurysm of the ascending aorta. Transesophageal echocardiography demonstrated severe aortic regurgitation (Fig. 1) with an ejection fraction of approximately 40%. In addition, there was evidence of a thrombus in ascending aorta (Fig. 2 and Fig. 3).

Left heart cardiac catheterization showed severe triple vessel coronary artery disease. Aortography confirmed severe aortic insufficiency along with a large Type II dis-

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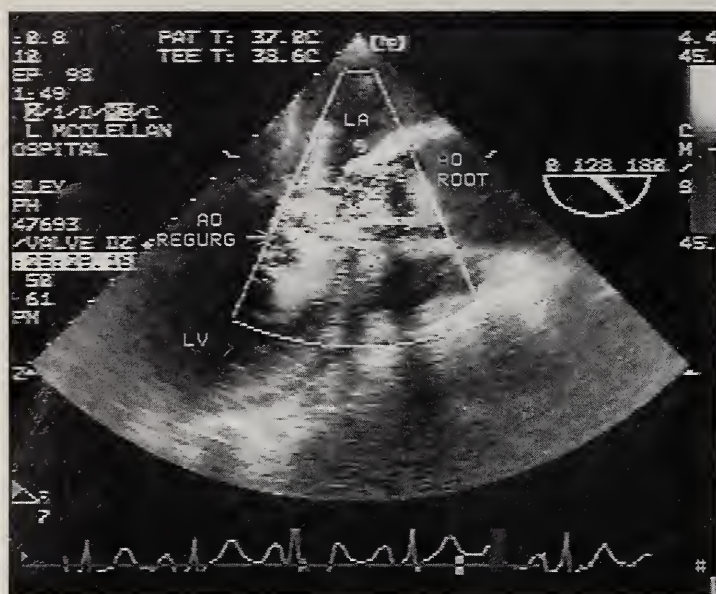


Figure 1: Transesophageal echocardiography (TEE) longitudinal axis view showing severe aortic regurgitation.

section of the ascending aorta (Fig. 4).

The patient was taken to surgery where he underwent five vessel coronary artery bypass grafting, insertion of a bioprosthetic valve in the aortic position, and repair of the ascending aorta with a Hemashield graft. He was discharged home on post-operative day 12.

Discussion

Pathophysiology. Aortic dissection is believed to begin with a tear in the aortic intima and exposing the underlying medial layer to the pulse pressure of the intramural blood. The blood then penetrates the diseased media and cleaving it into two layers, thus dissecting the aortic wall. An alternative explanation is that the

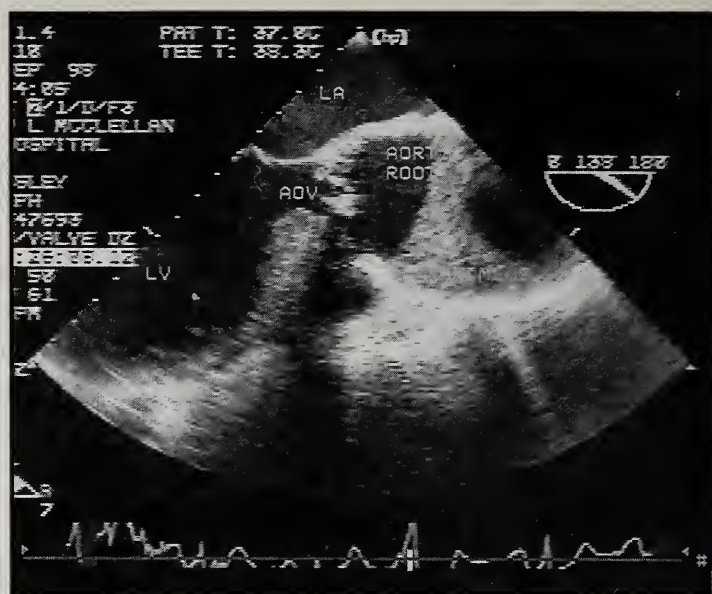


Figure 2: TEE long axis view showing thrombus in the ascending aorta.

aortic dissection may begin with rupture of the vasa vasorum within the aortic media with the development of intramural hematoma. Local hemorrhage then ruptures through the intima creating the intimal tear and aortic dissection. The blood filled space between the dissected layers of the aortic wall develops a false lumen. This column blood causes the initial flap to distend into the true lumen, thereby narrowing the caliber and distorting the shape of the aorta (Fig. 4). Sixty-five percent of intimal tears occur in the ascending aorta, 20% in the descending aorta, 10% in the aortic arch, and 5% in the abdominal aorta.²

Classification. Three major classification systems define the location and extent of aortic involvement

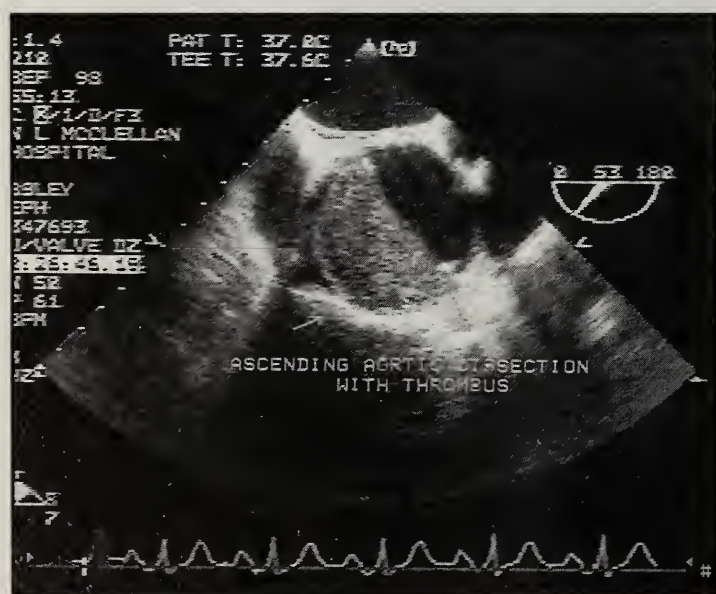


Figure 3: TEE short axis view showing thrombus in the ascending aorta.

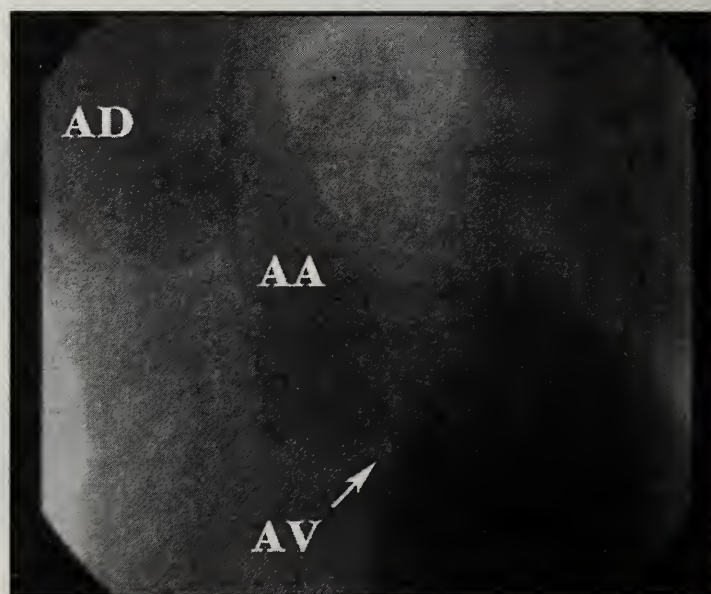


Figure 4: Aortic root gram in the right anterior oblique view showing dissection in the ascending aorta

(Table 2) ie, DeBakey Types I, II, and III³, Stanford Types A and B⁴, and the Anatomical categories "Proximal and Distal." All classifications share the principle of distinguishing those dissections with and without ascending aortic involvement, which has critical prognostic and therapeutic implications.

Aortic Regurgitation. Aortic regurgitation is an important feature of proximal aortic dissection. The murmur of aortic regurgitation due to ascending aortic dissection is detected in 16 - 67% of cases.⁵ Depending on the severity of the regurgitation volume, other peripheral signs of aortic incompetence may be present, such as collapsing pulse (Corrigan's pulse) and a widened pulse pressure.⁶ Congestive heart failure secondary to severe acute aortic insufficiency may occur with little or no murmur.

The aortic regurgitation associated with proximal aortic dissection, which occurs in one-half to two-thirds of cases,⁷ may result from any of several mechanisms. First, the dissection may dilate the aortic root, widening the annulus so that aortic leaflets are unable to coapt properly in diastole. Secondly, in an asymmetrical dissection, pressure from the descending hematoma may depress one leaflet below the coaptation line of the other leaflets, thus rendering the valve incompetent. Thirdly, the annular support of the leaflets or the leaflets themselves may be torn causing flail leaflet. Lastly, in the setting of an extensive or circumferential intimal tear, the unsupported intimal flap may prolapse into the left ventricular outflow tract, appearing as frank intimal intussusception,⁸ and producing severe aortic regurgitation.

Heart Surgery. Surgery is the treatment of choice for acute proximal dissection. Preoperative mortality ranges from 3% when surgery is expedited to as high as 20% when surgery is delayed.⁹ After resecting the diseased segment containing the intimal tear, as in our patient, continuity is reestablished by interposing a prosthetic sleeve between the two ends of the aorta.

When aortic regurgitation complicates aortic dissection, decompression of the false lumen is sometimes all that is required to allow re-suspension of the aortic leaflets and restoration of valvular competence. Prosthetic aortic valve replacement is frequently necessary when attempts at a valve repair are unsuccessful or in the setting of pre-existing valvular disease or in Marfan

Table 2. COMMONLY USED CLASSIFICATION SYSTEMS OF AORTIC DISSECTION

<u>TYPE</u>	<u>SITE OF ORIGIN</u>
DeBakey Type I	Originates in ascending aorta and propagates at least to the aortic arch and often beyond it
Type II	Originates in and is confined to the ascending aorta
Type III	Originates in descending aorta and extends distally down or retrogradely up into the aortic arch
Stanford Type A	All dissection involving ascending aorta regardless of the area of origin
Type B	All dissection not involving the ascending aorta
Descriptive Proximal	Includes DeBakey Types I and II or Stanford Type A
Distal	Includes DeBakey Type III or Stanford Type B

syndrome.¹⁰

Many surgeons recommend aortic valve replacement with even moderate aortic regurgitation will remain after the leaflets are re-suspended, choosing to avoid the risk of having to replace the aortic valve at some later date in a second operation through a diseased aorta.

Medical Management. Medical management is the treatment of choice for stable patients with: 1) uncomplicated distal dissection, 2) stable and isolated arch dissection, 3) stable chronic dissection (uncomplicated dissection presenting two weeks or later after onset). Patients admitted to the intensive care unit undergo hemodynamic monitoring. Intravenous sodium nitropruside and labetalol are very effective in decreasing blood pressure and shear stress on the aortic wall by reducing the systemic arterial resistance. However, surgery must clearly be performed in cases of medical management failure, such as rupture and impending rupture, progression of the dissection with vital organ compromise, aortic regurgitation or inability to control pain or blood pressure with medication.

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State Health Watch

Information provided by the Arkansas Department of Health, Division of Epidemiology

Hepatitis C Facts and Recommendations For Persons Who Have Health Concerns

Portions of the following material has been excerpted from the MMWR Recommendations and Reports, October 16, 1998 / Vol. 47 / No. RR-19

Hepatitis C is a disease of the liver, caused by a specific virus, hepatitis C virus (HCV).

HCV is a bloodborne virus, and is transmitted by contact with blood and/or blood-contaminated body fluids. Transfusion of HCV-contaminated blood is currently rare, but accounted for many cases until 10 years ago. Injecting-drug use accounts for approximately 60% of current acute HCV cases, but the overall number of new cases is decreasing, and this decrease correlates with the decrease in cases in injecting-drug users.

Prevalence of infection with HCV varies greatly according to the presence of certain risk factors. The greatest likelihood of infection (75-90%) is found in those with large or repeated exposure to blood. This includes injecting-drug users, persons treated chronically with clotting factors produced prior to 1987, and recipients of blood from HCV-infected donors. Persons who have had long-term hemodialysis have a moderate probability (app. 10%) of HCV infection, and a lower rate of infection (app. 5%) is found in persons with high-risk sexual practices or who have small, sporadic blood exposures. The general population, outside persons with known risk factors, has an infection rate between 1-2%.

The CDC estimates that there are 3.9 million infected persons, although the number of new infections each year has decreased from an average of 230,000 during the 1980's to 36,000 by 1996. Most of these persons are not aware of their infection, because they are not clinically ill.

Of the 25,000 deaths each year from chronic liver disease in the United States, studies indicate that 8,000-10,000 (40%) are HCV-related. Current estimates of medical and work-loss costs of HCV-related liver disease are

>\$600 million annually. As most HCV-infected persons are in the 30-49 year age group, the number of HCV-related deaths could increase substantially in the next 10-20 years.

Routine HCV testing is recommended for persons who have certain risk factors. These include the following:

1. Persons who have ever injected illegal drugs, even if they did so a few times years ago and do not consider themselves drug users.
2. Persons with selected medical conditions, including:
 - a. persons who received clotting factor concentrates produced before 1987;
 - b. persons who were ever on long-term hemodialysis; and
 - c. persons with persistently abnormal alanine aminotransferase levels.
3. Prior recipients of transfusions or organ transplants, including
 - a. persons who were notified that they received blood from a donor who later tested positive for HCV infection;
 - b. persons who received a transfusion of blood or blood components before July 1992; and
 - c. persons who received an organ transplant before July 1992.

Certain recognized exposures or events should also lead to routine testing for HCV infection. These are:

1. Healthcare, emergency medical, and public safety workers after needle sticks, sharps, or mucosal exposures to HCV-positive blood.
2. Children born to HCV-positive women.

Routine testing is not recommended for the following:

1. Health-care, emergency medical, and public safety workers

2. Pregnant women
 3. Household (nonsexual) contacts of HCV-positive persons
 4. The general population
- Persons for whom routine HCV testing is of uncertain need include:

1. Recipients of transplanted tissues
2. Intranasal cocaine and other noninjecting illegal drug users
3. Persons with a history of tattooing or body piercing
4. Persons with a history of multiple sex partners or sexually transmitted diseases
5. Long-term steady sex partners of HCV-positive persons.

Consent for testing should be obtained in a manner consistent with that for other medical care and services provided in the same setting, and should include measures to prevent unwanted disclosure of test results to others. Persons should be provided with information regarding:

1. exposures associated with the transmission of HCV, including behaviors or exposures that might have occurred infrequently or many years ago;
2. the test procedures and the meaning of test results;
3. the nature of hepatitis C and chronic liver disease;
4. the benefits of detecting infection early;
5. available medical treatment; and
6. potential adverse consequences of testing positive, including disrupted personal relationships and possible discriminatory action (e.g., loss of employment, insurance, and educational opportunities).

The only tests currently approved by the U.S. Food and Drug Administration (FDA) for diagnosis of HCV infection are those that measure anti-HCV. These tests detect anti-HCV in $\geq 97\%$ of infected patients, but do not distinguish between acute, chronic or resolved infection. Supplemental testing with a more specific assay (i.e., recombinant immunoblot assay [RIBATM]) of a specimen with a positive EIA result prevents reporting of false-positive results, particularly in settings where asymptomatic persons are being tested.

Persons with a negative EIA test result or a positive EIA test result with a negative supplemental test result are considered uninfected, unless other evidence exists to indicate HCV infection (e.g., abnormal ALT levels in immunocompromised persons or persons with no other etiology for their liver disease).

The diagnosis of HCV infection also can be made by qualitatively detecting HCV RNA using gene ampli-

fication techniques (e.g., RT-PCR). HCV RNA can be detected in serum or plasma within 1-2 weeks after exposure to the virus and weeks before the onset of ALT elevations or the appearance of anti-HCV. Rarely, detection of HCV RNA might be the only evidence of HCV infection. Although RT-PCR assay kits for HCV RNA are available for research purposes from various manufacturers of diagnostic reagents, none have been approved by FDA. In addition, numerous laboratories perform RT-PCR using in-house laboratory methods and reagents.

Although not FDA-approved, RT-PCR assays for HCV infection are used commonly in clinical practice. Most RT-PCR assays have a lower limit of detection of 100-1,000 viral genome copies/mL. With adequate optimization of RT-PCR assays, 75%-85% of persons who are anti-HCV positive and greater than 95% of persons with acute or chronic hepatitis C will test positive for HCV RNA. Some HCV-infected persons might be only intermittently HCV RNA positive, particularly those with acute hepatitis C or with end-stage liver disease caused by hepatitis C. To minimize false-negative results, serum must be separated from cellular components within 2-4 hours after collection, and preferably stored frozen or at -20 C or -70 C. If shipping is required, frozen samples should be protected from thawing. Because of assay variability, rigorous quality assurance and control should be in place in clinical laboratories performing this assay, and proficiency testing is recommended.

Hepatitis C is among the diseases reportable, by law, to the Arkansas Department of Health (ADH). To discuss HCV or for instructions on reporting Hepatitis C and other diseases, please call the ADH Division of Epidemiology at (501)661-2893 during normal business hours.



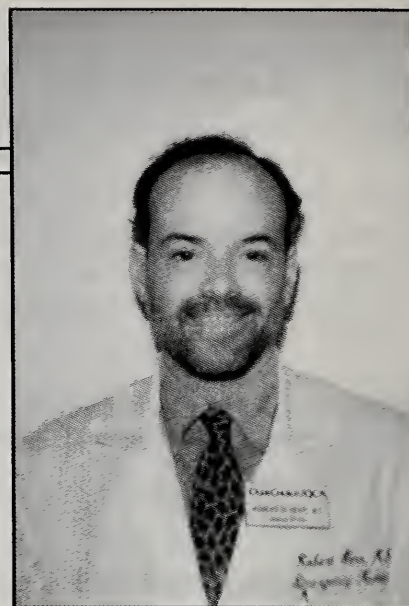
Reported Cases of Selected Diseases in Arkansas Profile for November 1998

The 3 month delay in the disease profile for a given month is designed to minimize any changes that may occur due to the effects of late reporting. The numbers in the table below reflect the actual disease onset date, if known, rather than the date the disease was reported.

Disease Name	Total Reported Cases YTD 1998	Total Reported Cases YTD 1997	Total Reported Cases YTD 1996	Total Reported Cases 1997	Total Reported Cases 1996
Campylobacteriosis	166	165	230	175	241
Giardiasis	160	215	162	220	182
Salmonellosis	588	412	434	445	455
Shigellosis	203	252	157	273	176
Hepatitis A	86	210	466	223	500
Hepatitis B	104	88	87	106	93
Hepatitis C	4	5	7	5	7
Meningococcal Infections	29	33	32	38	35
Viral/Aseptic Meningitis	61	24	35	26	38
Ehrlichiosis	13	22	7	22	7
Lyme Disease	7	28	27	27	27
Rocky Mtn Spotted Fever	24	33	22	31	22
Tularemia	25	24	24	24	24
Measles	0	0	0	0	0
Mumps	13	1	1	3	1
Gonorrhea	3623	4254	4692	4388	5050
Syphilis	283	361	688	394	706
Pertussis	93	59	14	60	14
Tuberculosis	138	163	183	200	225

New Member Profile

Robert D. Herr, M.D., MBA, FACEP



PROFESSIONAL INFORMATION

Specialty: Emergency Medicine

Years in Practice: Ten

Office: Little Rock

Medical School: Washington University Medical School, St. Louis, Missouri

Internship/Residency: Northwestern Memorial Hospital, 1985/1988

Other Business Affiliates/Organizations: Medical Director, Qual Choice/QCA, Clinical Associate Professor (Courtesy), University of Arkansas

Honors/Awards: 1994 Utah Emergency Physician of the Year, Edited *Emergency Care of the Comprised Patient* published by Lippincott-Raven, 1994, 800 pp.

PERSONAL INFORMATION

Spouse: Belinda Mertz, R.N.

Children: Tyler, 8 years old and Katie, 2 years old

Date/Place of Birth: April 22, 1958 in New Britain, Connecticut

Hobbies: Racquetball, model rocketry with son

THOUGHTS & OTHER INFORMATION

When I was a child, I wanted to be: an astronaut

Worst Habit: Concentration that makes me ignore my wife

Best Habit: same as above

Favorite junk food: Diet Cokes and Jelly Beans

What people say behind my back: "He's not from around here"

First Job: pumped gas and cleaned washrooms at a local airport

Worst Job: two years of internship

The last book I read: Curious George at the Circus

One word to sum me up: Perseverant

My Life's philosophy: Don't look back

New Members

BENTONVILLE

Stewart, Ewa Katarzyna, Pediatrics.
Medical Education, University of Texas Medical Branch, Galveston, 1994. Internship/Residency, Children's Hospital of Oklahoma, 1995/1997. Board Certified.

BELLA VISTA

Ellis, Margaret P., Internal Medicine.
Medical Education, University of Texas Medical Branch, Galveston, 1994. Internship, Presbyterian Hospital, Dallas, Texas, 1995. Residency, St. Paul Medical Center, Dallas, Texas, 1997. Board Certified.

DEQUEEN

Opiela, Jaroslaw P., Internal Medicine.
Medical Education, Karol Marcinkowski University of Medical Sciences, Poznan, Poland, 1990. Internship, Karol Marcinkowski University of Medical Sciences, 1991. Residency, Western Pennsylvania Hospital, Pittsburgh, Pennsylvania, 1998. Board Certified.

EDMOND, OKLAHOMA

Troy, Jerry R., Family Practice.
Medical Education, Oklahoma University Medical School, 1969. Internship, University of Missouri, Kansas City, 1970. Board Certified.

EL DORADO

Edmonson, Charles D., Interventional Radiology.
Medical Education, UAMS, Little Rock, 1976. Residency, Bowman Gray/ North Carolina Hospital, Winston Salem, North Carolina, 1976/1980. Board Certified.

FORT SMITH

Basinger, Norma S., Obstetrics and Gynecology.
Medical Education, University of South Carolina School of Medicine, Columbia, 1989. Residency, Richland Memorial Hospital/University of South Carolina School of Medicine, 1993. Board Certified.

LITTLE ROCK

Bates, Joseph H., Internal Medicine/Pulmonary Diseases.
Medical Education, UAMS, Little Rock, 1957. Internship/Residency, UAMS, Little Rock, 1958/1961. Board Certified.

Herr, Robert D., Administrative Medicine.
Medical Education, Washington University Medical School, St. Louis, Missouri, 1984. Internship/Residency, Northwestern Memorial Hospital, 1985/1988. Board Certified.

Schally, Gordon R., Radiology.
Medical Education, Louisiana State University School of Medicine, 1987. Internship, Eisenhower Army Medical Center, Fort Gordon, Georgia, 1988. Residency, Brooke Army Medical Center, Houston, Texas, 1993. Board Certified.

Taylor, Martin A., Obstetrics and Gynecology.
Medical Education, Texas Tech University Health Science Center School of Medicine, Lubbock, 1991. Internship/Residency, University Medical Center, Texas Tech University School of Medicine, Lubbock, 1992/1995. Board Eligible.

MORRILTON

Burdge, Jr, Lawrence R., Obstetrics and Gynecology.
Medical Education, Cornell University Medical College, New York, New York, 1971. Internship, University of Miami, Florida, 1972. Residency, University of Rochester, 1975. Board Certified.

NEWPORT

Gross, Rickey L., Emergency Medicine.
Medical Education, American University of the Caribbean, Plymouth, Montserrat, BWI, 1981. Residency, Wayne State University, Detroit, Michigan, 1984.

OZARK

Richter, David A., Family Practice.
Medical Education, University of Iowa, Iowa City, 1989. Internship/Residency, University of Iowa, Iowa City, 1990/1992. Board Certified.

SPRINGDALE

Bingham, Jennifer A., Internal Medicine. Medical Education, University of Kansas, Kansas City, 1991. Internship/Residency, Kansas University Medical Center, 1992/1994. Board Certified.

Pichoff, II, Bruce E., Pediatrics, Neonatal and Perinatal Medical Education, Louisiana State University School of Medicine, New Orleans, 1986. Internship/Residency, William Beaumont Army Medical Center, E. Paso, Texas, 1989. Board Certified.

STAR CITY

Whipple, Paul F., Family Practice. Medical Education, University of New England College of Osteopathic Medicine, Biddeford, Maine, 1990. Internship, Cranston General Hospital, Cranston, Rhode Island, 1990/1991. Residency, Community Hospital of Rhode Island, Cranston, Rhode Island, 1991/1993. Board Certified.

WALDRON

Richards, Michael O., Internal Medicine. Medical Education, University of Stellenbosch, South Africa, 1985. Internship/Residency, Betermaritzburg, South Africa, 1986, Connecticut, 1995/1998. Board Certified.

RESIDENTS/INTERNS

McDonnell, Bryan D., Family Practice. Medical Education, UAMS, Little Rock, 1997. Internship/Residency, AHEC - Southwest, Texarkana.

STUDENTS

Strnad, Petra J.

In Memoriam

C. Harold Beasley, M.D.

C. Harold Beasley, M.D., was born March 5, 1916 in Cabot Ark, attended public schools in Little Rock, AR; graduated University of Arkansas at Fayetteville, 1937; graduated University of Arkansas Medical School, 1941. He completed post doctoral training in ophthalmology at Washington University and Barnes Hospital in St. Louis, 1945-1950. He was a Diplomat of the American Board of Ophthalmology.

He practiced medical and surgical ophthalmology in Fort Worth, Texas, from 1950-1980. He continued ophthalmic practice in Heber Springs, AR from 1980 to 1986. He was a consultant to Alcon Laboratories, Fort Worth, Texas, for 46 years.

He was a member of the prestigious American Ophthalmological Society; past president United States Eye Study Club; fellow, American College of Surgeons; fellow, American Academy of Ophthalmology; past president Texas Ophthalmological Association; past president, Tarrant County Medical Society Fort Worth, Texas;

and Life Member of the Arkansas Medical Society. He authored 28 publications in the ophthalmic scientific literature.

He received the Gold Headed Cane Award of the Tarrant County Medical Society in 1973 and in 1976 was honored with The Man of Vision Award of the Texas Society to Prevent Blindness.

He served as a Flight Surgeon in the U.S. Army Air Force 1942-1942 in the American and Pacific Theaters.

He was an accomplished airplane pilot for 60 years until his 81st birthday when he became a member of the United Flying Octogenarians. He enjoyed wing shooting and ranching.

He is survived by his wife, Eleanor Beasley; his brother, Col. Clarence Beasley; his three children, Rebecca Ann Beasley, Ph.D.; Cliff H. Beasley, Jr., M.D.; Peggy Rush; two stepdaughters, Karol Burns and Lu Ellen Waller, 10 grandchildren; and two nieces.

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ARKANSAS MEDICAL SOCIETY

123RD ANNUAL SESSION

PARK HILTON
HOT SPRINGS CONVENTION CENTER
HOT SPRINGS, ARKANSAS

APRIL 29 - MAY 1, 1999



CROSSING THE BRIDGE TO THE YEAR 2000

Thursday, April 29, 1999

- 9:00 a.m.
Golf Tournament
- 11:30 a.m.
Fifty Year Club Luncheon
- 12:30 p.m.
Council Meeting
- 1:00 p.m.
Registration Opens
- 1:00 p.m.
Seminar for Young Physicians
- 3:30 p.m.
House of Delegates
- 4:15 p.m.
Reference Committees
- 6:00 p.m.
Welcome Reception in the Exhibit Center

Friday, April 30, 1999

- 7:30 a.m.
Registration Opens
- 7:30 a.m.
Council Meeting (tentative)
- 8:00 a.m.
Exhibits Open All Day
- 8:00 a.m.
Continental Breakfast Served in the Exhibit Center
- 8:45 a.m.
First Feature Session

Friday, April 30, 1999 (con't)

- 10:00 a.m.
Break
- 10:15 a.m.
Second Feature Session
- 11:45 a.m.
Shuffield Luncheon
- 1:15 p.m.
Afternoon Break in the Exhibit Center
- 3:00 p.m.
Third Feature Session
- 6:00 p.m.
Hospitality Hour
- 7:00 p.m.
Inaugural Banquet
- 9:00 p.m.
President's Reception

Saturday, May 1, 1999

- 8:30 a.m.
Fourth Feature Session
- 10:00 a.m.
House of Delegates
- 11:30 a.m.
Specialty Meetings & Committee Meetings

Please note: Schedule is tentative and is subject to change. Prior to the convention, you will receive an updated schedule of events.

Convention Highlights

Harold "Bud" Purdy Memorial Golf Tournament
Thursday, April 29, 1999
9:00 a.m.

Both serious golfers and those who just like to have fun will enjoy this golf tournament. The tournament is a 4-person scramble.

Welcome Reception
Thursday, April 29, 1999
6:00 p.m. - 7:30 p.m.

Renew old acquaintances and meet new attendees at the Welcome Reception in the Exhibit Center. There will be refreshments and prizes.

Shuffield Luncheon
Friday, April 30, 1999
11:45 a.m. - 1:15 p.m.

The Shuffield Award will be presented at the luncheon. The luncheon speaker will focus on current political issues.

Continental Breakfast & Afternoon Break
Friday, April 30, 1999
8:00 a.m. & 1:15 p.m.

The scheduled breaks in the exhibit center are designed to encourage the attendees to visit the exhibitors and also give them a chance to relax between educational sessions. At each scheduled break, there will be a "Grand Prize" drawing.

Inaugural Banquet & President's Reception
Friday, April 30, 1999
7:00 p.m. & 9:00 p.m.

Dr. Lloyd G. Langston of Pine Bluff will be installed as the 1999-2000 President of the Arkansas Medical Society. Join us for a fabulous dinner and entertainment.

Things To Come

March 19 - 21, 1999

Clinical Infectious Disease '99: A Management Review for the Practicing Physician. The Waldorf-Astoria Hotel, New York, New York. Sponsored by the Center for Bio-Medical Communication, Inc. For more information, call 201-342-5300 or E-mail: cmeinfo@cbcbiomed.com.

March 29 - April 1, 1999

11th Annual National Managed Health Care Congress. Georgia World Congress Center, Atlanta, Georgia. For more information, call 888-882-2500.

April 23 - 24, 1999

Oncology in the New Millennium. The Ritz-Carlton Hotel, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

April 23 - 30, 1999

58th Annual American Occupational Health Conference. Ernest N. Morial Convention Center, New Orleans, Louisiana. Sponsored by the American College of Occupational and Environmental Medicine. For more information, call 847-228-6850 extension 180; FAX: 847-228-1856; Internet: <http://www.acoem.org>

May 1 - 6, 1999

American Society of Colon and Rectal Surgeons Annual Meeting/Celebrating the Society's 100 Year Anniversary. Washington, D.C. For more information, call 847-290-9184; FAX: 847-290-9203; Website: <http://www.fascrs.org/>.

May 19 - 21, 1999

Peripheral Artery Disease: Contemporary Strategies for Diagnosis and Therapy. Heart House Learning Center, Bethesda, Maryland. Sponsored by the American College of Cardiology. For more information, call 800-253-4636 ext. 652 or FAX: 301-897-9745

June 7 - 9, 1999

Approach to Advanced Heart Failure: Medical and Surgical Options. Heart House Learning Center, Bethesda, Maryland. Sponsored by the American College of Cardiology. For more information, call 800-253-4636 ext. 652 or FAX: 301-897-9745

Keeping Up

Continuing Medical Education Opportunities in Arkansas

February 16, 1999

ARORA - St. Joseph's Regional Health Center, Mercy Room, Hot Springs. Time: 12:15 p.m. Lunch provided. Sponsored by St. Joseph's Regional Health Center. For more information, call (501) 622-1024.

February 23, 1999

Wound Care - St. Joseph's Regional Health Center, Mercy Room, Hot Springs. Time: 12:15 p.m. Lunch provided. Sponsored by St. Joseph's Regional Health Center. For more information, call (501) 622-1024.

February 26, 1999

Hyperlipidemia - National Park Medical Center, Physicians Dining Room, Hot Springs. Time: 12:30 p.m. Lunch provided. Sponsored by National Park Medical Center. For more information, call (501) 620-1420.

April 29 - May 1, 1999

Arkansas Medical Society's 123rd Annual Session
Park Hilton, Hot Springs Convention Center
Hot Springs, Arkansas. For more information, call 501-224-8967 or 800-542-1058.

Keeping Up

Recurring Education Programs

The following organizations are accredited by the Arkansas Medical Society to sponsor continuing medical education for physicians. The organizations named designate these continuing medical education activities for the credit hours specified in Category 1 of the Physician's Recognition Award of the American Medical Association.

FAYETTEVILLE

VA MEDICAL CENTER

Medical Grand Rounds/General Medical Topics, Thursdays, 12:00 p.m., Auditorium, Bldg. 3

WASHINGTON REGIONAL MEDICAL CENTER

Chest Conference, 1st Wednesday of every month, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided

Grand Rounds Conference, 3rd Wednesday of every month, 7:30 - 8:30 a.m., Baker Conference Center, breakfast provided.

Primary Care Conferences, every Monday, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided

Tumor Conference, every Thursday, 7:30 - 8:30 a.m., WRMC, Baker Conference Center, no fee, breakfast provided

HARRISON

NORTH ARKANSAS MEDICAL CENTER

Cancer Conference, October 22, November 3, and December 22, 12:00 p.m., Conference Room

HOT SPRINGS

ST. JOSEPH'S REGIONAL HEALTH CENTER

Cancer Conference, every Monday, 12:15 p.m., St. Joseph's Mercy Room

Chest Conference, Quarterly on last Tuesday of month beginning November 24, 12:15 p.m., St. Joseph's Mercy Room.

Medicine Not So Grand Rounds, Second Tuesday each month, 12:15 p.m., St. Joseph's Mercy Room. Lunch provided.

LITTLE ROCK

ST. VINCENT INFIRMARY MEDICAL CENTER

Cancer Conferences, Thursdays, 12:00 p.m., Southwestern Bell/Arkla room. Lunch provided.

General Surgery Grand Rounds, 1st Thursday, 7:00 a.m. Southwestern Bell/Arkla Room. Light breakfast provided.

Interdisciplinary AIDS Conference, 2nd Friday, 12:00 p.m., Southwestern Bell/Arkla Room. Lunch provided.

Journal Club, Tuesdays, 12:00 p.m., Southwestern Bell/Arkla Room. Lunch provided.

Pulmonary Conference, 4th Wednesday, 12:00 p.m., Southwestern Bell/Arkla Room. Lunch provided.

BAPTIST MEDICAL CENTER

Breast Conference, 3rd Thursday, 7:00 a.m., J. A. Gilbreath Conference Center

Gastroenterology/Surgery Journal Club, dates vary, AR Gastroenterology Memorial Medical Plaza, Suite 3A. Call 501- 202-2673 or 202-3888 for more information.

Grand Rounds Conference, Wednesdays, 12:00 p.m., Shuffield Auditorium. Lunch provided.

Pulmonary Conference, Tuesdays, 12:00 p.m., Shuffield Auditorium. Lunch provided.

Sleep Disorders Case Conference, dates vary, 12:00 p.m.. Call 202-2673 for date and location. Lunch provided.

MOUNTAIN HOME

BAXTER COUNTY REGIONAL HOSPITAL

Lecture Series, 3rd Tuesday, 6:30 p.m., Education Building

Tumor Conference, Tuesdays, 12:00 p.m., Carti Boardroom

The University of Arkansas College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor the following continuing medical education activities for physicians. The Office of Continuing Medical Education designates that these activities meet the criteria for credit hours in category 1 toward the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

LITTLE ROCK

ARKANSAS CHILDREN'S HOSPITAL

Faculty Resident Seminar, 3rd Thursday, 12:00 p.m., Sturgis Auditorium

Genetics Conference, Wednesdays, 1:30 p.m., Conference Room, Springer Building

Infectious Disease Conference, 2nd Wednesday, 12:00 p.m., 2nd Floor Classroom

Pediatric Grand Rounds, Tuesdays, 8:00 a.m., Sturgis Bldg., Auditorium

Pediatric Neuroscience Conference, 1st Thursday, 8:00 a.m., 2nd Floor Classroom

Pediatric Pharmacology Conference, 5th Wednesday, 12:00 p.m., 2nd Floor Classroom

Pediatric Research Conference, 1st Thursday, 12:00 p.m., 2nd Floor Classroom

UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

ACRC Multi-Disciplinary Cancer Conference (Tumor Board), Wednesdays, 12:00 p.m., ACRC 2nd floor Conference Room.

Anesthesia Grand Rounds/M&M Conference, Tuesdays, 6:00 a.m., UAMS Education III Bldg., Room 0219

Autopsy Pathology Conference, Wednesdays, 8:30 a.m., VAMC-LR Autopsy Room

Cardiology-Cardiovascular & Thoracic Surgery Conference, Wednesdays, 11:45 a.m., UAMS, Shorey Bldg., room 3S/06

Cardiology Grand Rounds, 2nd & 4th Mondays, 4:00 p.m., UAMS Shorey Bldg., 3S/06

Cardiology Morning Report, every morning, 7:30 a.m., UAMS, Shorey Bldg. room 3S/07

Cardiothoracic Surgery M&M Conference, 2nd Saturday each month, 8:00 a.m., UAMS, Shorey Bldg. room 2S/08

CARTI/Searcy Tumor Board Conference, 2nd Wednesday, 12:30 p.m., CARTI Searcy, 405 Rodgers Drive, Searcy.

Centers for Mental Healthcare Research Conference, 1st & 3rd Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research

CORE Research Conference, 2nd & 4th Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research

Endocrinology Grand Rounds, Fridays, 12:00 p.m., ACRC Bldg., Sam Walton Auditorium, 10th floor

Gastroenterology Grand Rounds, Thursdays, 4:00 p.m., UAMS Hospital, room 3D29 (1st Thurs. at ACH)

Gastroenterology Pathology Conference, 4:00 p.m., 1st Tuesday each month, UAMS Hospital

GI/Radiology Conference, Tuesdays, 8:00 a.m., UAMS Hospital, room 3D29

In-Vitro Fertilization Case Conference, 2nd & 4th Wednesdays each month, 11:00 a.m., Freeway Medical Tower, Suite 502 Conf. Rm

Medical/Surgical Chest Conference, each Monday, 4:00 p.m., UAMS Hospital, room M1/293

Medicine Grand Rounds, Thursdays, 12:00 p.m., UAMS Education II Bldg., room 0131

Medicine Research Conference, one Wednesday each month, 4:30 p.m. UAMS Education II Bldg. room 0131A

Neuropathology Conference, 2nd Wednesday each month, 4:00 p.m., AR State Crime Lab, Medical Examiner's Office

Neurosurgery, Neuroradiology & Neuropathology Case Presentations, Thursdays, 4:00 p.m., UAMS Hospital

OB/GYN Fetal Boards, 2nd Fridays, 8:00 a.m., ACH Sturgis Bldg.

OB/GYN Grand Rounds, Wednesdays, 7:45 a.m., UAMS Education II Bldg., room 0141A

Ophthalmology Problem Case Conference, Thursdays, 4:00 p.m., UAMS Jones Eye Institute, 2 credit hours

Orthopaedic Basic Science Conference, Tuesdays, 7:30 a.m., UAMS Education II Bldg., room B/107

Orthopaedic Bibliography Conference, Tuesdays, Jan. - Oct., 7:30 a.m., UAMS Education II Bldg.

Orthopaedic Fracture Conference, Tuesdays, 9:00 a.m., UAMS Education II Bldg., room B/107

Orthopaedic Grand Rounds, Tuesdays, 10:00 a.m., UAMS Education II Bldg., room B/107

Otolaryngology Grand Rounds, 2nd Saturday each month, 9:00 a.m., UAMS Biomedical Research Bldg., room 205

Otolaryngology M&M Conference, each Monday, 5:30 p.m., UAMS Otolaryngology Conf. Room

Perinatal Care Grand Rounds, every Tuesday, 12:15 p.m., BMC, 2nd floor Conf. Room

Psychiatry Grand Rounds, Fridays, 11:00 a.m., UAMS Child Study Center Auditorium

Surgery Grand Rounds, Tuesdays, 8:00 a.m., ACRC Betsy Blass Conf.

Surgery Morbidity & Mortality Conference, Tuesdays, 7:00 a.m., ACRC Betsy Blass conference room, 2nd floor

NLRVA Geriatric/Medicine Grand Rounds, Thursdays, 8:00 a.m., VAMC-NLR, Bldg 68, room 130

VA Medical Service Clinical Case Conference, Fridays, 12:00 p.m., VAMC-LR, room 2D109

VA Pathology-Hematology/Oncology-Radiology Patient Problem Conference, Thursdays, 8:15 a.m., VAMC-LR, room 2E142

VA Psychiatry Difficult Case Conference, 4th Monday, 12:00 p.m., VAMC-NLR, Mental Health Clinic

VA Lung Cancer Conference, Thursdays, 3:00 p.m., VAMC-LR, room 2E142

VA Medical Service Teaching Conference, Thursdays, 8:00 a.m., VAMC-NLR, Bldg. 68 room 130

VA Medicine-Pathology Conference, Tuesday, 2:00 p.m., VAMC-LR, room 2D109

VA Medicine Resident's Clinical Case Conference, Fridays, 12:00 p.m., VAMC-LR, room 2D08

VA Physical Medicine & Rehab Grand Rounds, 4th Friday, 11:30 a.m., VAMC-NLR Bldg. 68, room 118 or Baptist Rehab Institute

VA Surgery Grand Rounds, Thursdays, 12:45 p.m., VAMC-LR, room 2D109, 1.25 credit hours

VA Topics in Rehabilitation Medicine Conference, 2nd, 3rd, & 4th Thursdays, 8:00 a.m., VAMC-NLR Bldg. 68, room 118

VA Weekly Cancer Conference, Monday, 3:00 p.m., VAMC-LR, room 2E-142

White County Memorial Hospital Medical Staff Program, once monthly, dates & times vary, White County Memorial Hospital, Searcy

EL DORADO-AHEC

Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., Warner Brown Campus, 6th fl. Conf. Rm.

Behavioral Sciences Conference, 1st & 4th Friday, 12:15 p.m., AHEC

Chest Conference, 3rd Wednesday, 12:15 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.

Dermatology Conference, 1st Tuesdays and 1st Thursdays, AHEC

GYN Conference, 2nd Friday, 12:15 p.m., AHEC

Internal Medicine Conference, 1st, 2nd & 4th Wednesday, 12:15 p.m., AHEC

Noon Lecture Series, 2nd & 4th Thursday, 12:00 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.

Obstetrics-Gynecology Conference, 4th Thursday, 12:15 p.m. AHEC

Pathology Conference, 2nd Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5. Lunch provided.

Pediatric Conference, 3rd Friday, 12:15 p.m., AHEC

Pediatric Case Presentation, 3rd Tuesday, 3rd Friday, AHEC

Surgical Conference, 1st, 2nd & 3rd Monday, 12:15 p.m., AHEC

Tumor Clinic, 4th Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5, Lunch provided.

VA Hematology/Oncology Conference, Thursdays, 8:15 a.m., VAMC-LR Pathology conference room 2E142

FAYETTEVILLE-AHEC NORTHWEST

AHEC Teaching Conferences, Tuesdays & Wednesdays, 12:00 p.m., AHEC Classroom

AHEC Teaching Conferences, Fridays, 12:00 p.m., AHEC Classroom

AHEC Teaching Conferences, Thursdays, 7:30 a.m., AHEC Classroom

Medical/Surgical Conference Series, 4th Tuesday, 12:30, Bates Medical Center, Bentonville

FORT SMITH-AHEC

Grand Rounds, 12:00 p.m., first Wednesday of each month, Sparks Regional Medical Center

Neuroradiology Conference, 1st Tuesday of each month, 12:00 p.m., Sparks Regional Medical Center, 7th floor dining room

Neuroscience & Spine Conference, 3rd Wednesday each month, 12:00 p.m., St. Edward Mercy Medical Center

Tumor Conference, Mondays, 12:00 p.m., St. Edward Mercy Medical Center

Tumor Conference, Wednesdays, 12:00 p.m., Sparks Regional Medical Center

JONESBORO-AHEC NORTHEAST

AHEC Lecture Series, 1st & 3rd Tuesday, 12:00 p.m., Stroud Hall, St. Bernard's Regional Medical Center. Lunch provided.

Arkansas Methodist Hospital CME Conference, 7:30 a.m., Hospital Cafeteria, Arkansas Methodist Hospital, Paragould

Chest Conference, 2nd Tuesday, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch provided.

Citywide Cardiology Conference, 3rd Thursday, 7:30 p.m., Jonesboro Holiday Inn

Clinical Faculty Conference, 5th Tuesday, St. Bernard's Regional Medical Center, Dietary Conference Room, lunch provided

Craighead/Poinsett Medical Society, 1st Tuesday, 7:00 p.m. Jonesboro Country Club

Greenleaf Hospital CME Conference, monthly, 12:00 p.m., Greenleaf Hospital Conference Room. Lunch provided.

Independence County Medical Society, 2nd Tuesday, 6:30 p.m., Batesville Country Club, Batesville

Interesting Case Conference, 4th Tuesday, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch provided.

Jackson County Medical Society, 3rd Thursday, 7:00 p.m., Newport Country Club, Newport

Kennett CME Conference, 3rd Monday, 12:00 p.m., Twin Rivers Hospital Cafeteria, Kennett, MO

Methodist Hospital of Jonesboro Cardiology Conference, every other month, 7:00 p.m., alternating between Methodist Hospital Conference Room and St. Bernard's, Stroud Hall. Meal provided.

Methodist Hospital of Jonesboro CME Conference, 2nd Tuesday, 7:00 p.m., Cafeteria, Methodist Hospital of Jonesboro

Neuroscience Conference, 3rd Monday, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch Provided.

Orthopedic Case Conferences, every other month beginning in January, 7:30 a.m., NE Arkansas Rehabilitation Hospital

Perinatal Conference, 2nd Wednesday, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch provided.

Piggott CME Conference, 3rd Thursday, 6:00 p.m., Piggott Hospital. Meal provided.

Pocahontas CME Conference, 3rd Wednesday, 12:00 p.m. & 7:30 p.m., Randolph County Medical Center Boardroom

Tumor Conference, Thursdays, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch provided.

Walnut Ridge CME Conference, 3rd & last Tuesday, 12:00 p.m., Lawrence Memorial Hospital Cafeteria

White River CME Conference, 3rd Thursday, 12:00 p.m., White River Medical Center Hospital Boardroom

PINE BLUFF-AHEC

Behavioral Science Conference, 1st & 3rd Thursday, 12:00 p.m., Jefferson Regional Medical Center

Chest Conference, 2nd & 4th Friday, 12:00 p.m., Jefferson Regional Medical Center

FP Journal Club, 2nd Monday, 12:00 p.m., Jefferson Regional Medical Center

Internal Medicine Conference, 2nd & 4th Thursdays, 12:00 p.m., Jefferson Regional Medical Center

Obstetrics/Gynecology Conference, 2nd Tuesday, 12:00 p.m., Jefferson Regional Medical Center

Orthopedic Case Conference, 2nd & 4th Wednesdays, 12:00 p.m., Jefferson Regional Medical Center.

Pediatric Conference, 3rd Wednesday, 12:00 p.m., Jefferson Regional Medical Center

Radiology Conference, 3rd Tuesday, 12:00 p.m., Jefferson Regional Medical Center

Southeast Arkansas Medical Lecture Series, 4th Tuesday, 6:30 p.m., Locations vary. Dinner meeting.

Tumor Conference, 1st Wednesday & 3rd Friday, 12:00 p.m., Jefferson Regional Medical Center

TEXARKANA-AHEC SOUTHWEST

Chest Conference, every other 3rd Tuesday/quarterly, 12:00 p.m., St. Michael Health Care Center

Neuro-Radiology Conference, 1st Thursday every month at St. Michael Health Care Center and 3rd Thursday of every month at Wadley Regional Medical Center, 12:00 p.m..

Residency Noon Conference, Monday, Wednesday, Thursday, Friday each week, alternates between St. Michael Health Care Center & Wadley Regional Medical Center

Tumor Board, Fridays, except 5th Friday, 12:00 p.m., Wadley Regional Medical Center & St. Michael Hospital

Tumor Conference, every 5th Friday, 12:00 p.m. alternates between Wadley Regional Medical Center & St. Michael Hospital

To

those physicians who volunteer
through the Arkansas Health

Care Access Foundation,

Thank You!

As you can see from a sampling of
letters we have received, your
involvement in our program is
appreciated and in many
cases life-saving.

It has been three days since you
sent me to the doctor and I have
a ways to go to be 100%, but I can
breathe and walk across the room
now. I had given up hope almost,
and I remembered Arkansas Health
Care. The doctor gave me two of
the medicines I needed and the
pharmacy you sent me to filled the
antibiotics. Your doctor even
"chewed" me out for not coming in
two weeks previously. I'm starting
to feel good again. God bless you.

Western Wildlife

As Easterners moved West, pioneers
found animals as exotic as the land...
buffalo, prairie dogs, bears, beaver, bighorn
sheep, cougars, wolves and rattlesnakes.

The eagle became a national symbol.

I wanted to thank everyone
involved with this
program. We had no
one else to turn to
and we were in desperate
need of doctors and
medications.

Your program has
helped us through a very
difficult time.



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Foundation

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Little Rock, AR

727-15-6248

I would like to say thank you first
of all. Your program made it
possible for me to have a
mammogram when I had no
where else to turn. I did not
realize there was such a program.
...it is a much needed program.
Thanks again.

For more
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on how
you can help,
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or (800) 950-8233



Arkansas Health Care
Access Foundation, Inc.

Due to your generous
assistance, I was able to
see an eye doctor and no
longer fear the loss of my
vision. Thank you all for
being there.

When I needed medical
attention, I was blessed with the
knowledge of your program.
There were kind and helpful
people to guide me.

THANK YOU FOR MAKING THE DIFFERENCE!

Continuing Medical Education Contacts:

The following is a list of telephone numbers physicians can call for more information on CME activities

EL DORADO
AHEC
870-862-2489

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AHEC
501-521-8260

VA Medical Center
501-444-5050

Washington Regional Medical Center
501-442-1823

FORT SMITH
AHEC
501-785-2431

HARRISON
North Arkansas Medical Center
870-365-2098

HOT SPRINGS
National Park Medical Center
501-620-1420

St. Joseph's Regional Health Center
501-622-1024

JONESBORO
AHEC
870-972-0063

LITTLE ROCK
Arkansas Children's Hospital
501-320-1248

Arkansas Medical Society
501-224-8967

Baptist Medical Center
501-202-2673

St. Vincent Infirmary Medical Center
501-660-3592
or 501-660-3594

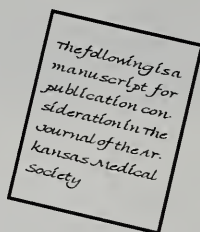
University of Arkansas for Medical Sciences
(UAMS)
501-661-7962

MOUNTAIN HOME
Baxter County Regional Hospital
870-424-1760

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870-541-7611

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The AMS Membership Directory

A quick and easy guide to AMS physician members, the directory provides addresses, phone and fax numbers, specialties and E-mail addresses. Plus other health related information. The directories are printed each year in late July.

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The AMS's Physician's Legal Guide

A compilation of state and federal laws affecting the practice of medicine in Arkansas, this guide is 170 pages on topics such as medical records, patient abandonment, medical board regulations, Antitrust Law, Workers' Compensation, & much more. The List Price is \$100.00. **AMS Member Price is \$70.00.**

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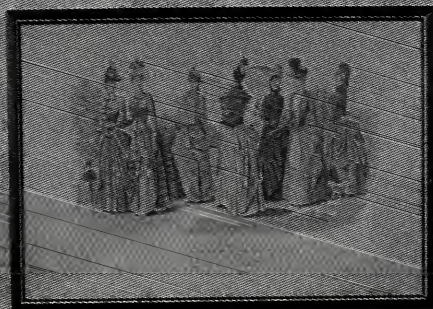
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THE JOURNAL OF THE ARKANSAS MEDICAL SOCIETY

Volume 95 Number 10

March 1999

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THE JOURNAL OF THE ARKANSAS MEDICAL SOCIETY

Volume 95 Number 9

March 1999

*Award-Winning Journal of the Arkansas Medical Society
Recipient of the ASAE Excellence in Communications Award*

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Cover photo, courtesy of the Arkansas Department of Parks and Tourism. This photo was taken by A. C. Haralson.

Topics in Search of Authors



You can influence your peers - and give something back to your profession - if you plan to write an article for *The Journal of the Arkansas Medical Society*.

The Journal needs your thoughts and ideas. So why not consider putting your expertise and experience on paper? Here are some topics in search of an author:

- Practice Management for today's physicians
- Coping with difficult patients
- Women's health issues
- Teens and drug use
- Medicare/Medicaid issues
- Medical ethics and health care
- New treatments and technology
- Access to care for the indigent

For information about submitting an article to *The Journal of the Arkansas Medical Society*, see *information for Authors* on the last page of this issue or call Managing Editor at 501-224-8967 or 1-800-542-1058.

The Arkansas Medical Society

*dedicated to preserving
the high standards of medicine*

The Arkansas Medical Society is a statewide organization that represents all physicians, regardless of specialty, location or type of practice.

The result is a statewide network united for the common good of the medical profession.

The management and staff of the Arkansas Medical Society provide members with the best information and services available.

If you have any questions
or would like to find out more about
the Arkansas Medical Society,
call: 501-224-8967

or write to:

AMS

PO Box 55088

Little Rock, AR 72215-5088

or visit our Website at:

Arkansas Medical Society Publications

The AMS Membership Directory

A quick and easy guide to AMS physician members, the directory provides addresses, phone and fax numbers, specialties and E-mail addresses. Plus other health related information. The directories are printed each year in late July.

The directories are \$50 each. With a purchase of 2 to 10, \$45 each; 11 or more, \$35 each. (Note: All AMS members receive one free directory through the mail immediately after publication in August of each year.)

The AMS's Physician's Legal Guide

A compilation of state and federal laws affecting the practice of medicine in Arkansas, this guide is 170 pages on topics such as medical records, patient abandonment, medical board regulations, Antitrust Law, Workers' Compensation, & much more. The List Price is \$100.00. **AMS Member Price is \$70.00.**

The Journal of the Arkansas Medical Society

The Journal of the Arkansas Medical Society is published monthly. Every AMS member receives *The Journal* as part of their membership. Subscriptions are available for \$30.00 per year for domestic or \$40.00 for foreign.

Ordering Information:

Send a check or money order made payable to AMS in the amount of your purchase to: AMS, P.O. Box 55088, Little Rock, AR 72215-5088. Be sure to indicate which publication you are ordering and include the name and address of who and where to mail your order. Visa/MasterCard is accepted for payment of the membership directory and the legal guide, but not for journal subscriptions.

For more information, call AMS at 501-224-8967.

ARKANSAS MEDICAL SOCIETY

123RD ANNUAL SESSION REGISTRATION

CROSSING THE BRIDGE TO THE YEAR 2000



PARK HILTON AND HOT SPRINGS CONVENTION CENTER

**APRIL 29 - MAY 1, 1999
HOT SPRINGS, ARKANSAS**

CME programs joint-sponsored by St. Joseph's Regional Health Center

ARKANSAS MEDICAL SOCIETY

APRIL 29 - MAY 1, 1999

HOT SPRINGS, ARKANSAS

TARGET AUDIENCE

This meeting is designed primarily for Arkansas physicians concerned with health care issues that affect the practice of medicine. Clinic managers, medical students, residents and other health care professionals will also benefit from this program.

CONTINUING MEDICAL EDUCATION

Physicians attending the CME programs will be able to:

- *Summarize the actions being taken by the AMA to improve medical care and learn how changes on the national level will affect the practice of medicine.

- *Develop a fraud and abuse compliance plan.

- *Identify the most commonly used forms of alternative medicine.

- *Have a fuller understanding of the Medicare PRO review program and the changes being implemented through the 6th Scope of Work.

- *Identify changes in Arkansas laws and their impact on the delivery and quality of medical care.

CME programs held during the annual meeting are being joint-sponsored by St. Joseph's Regional Health Center.

This activity has been planned and implemented in accordance with the Essentials and Standards of the Arkansas Medical Society through the joint sponsorship of St. Joseph's Regional Health Center and the Arkansas Medical Society. St. Joseph's Regional Health Center is accredited by the Arkansas Medical Society to provide continuing medical education for physicians.

St. Joseph's Regional Health Center designates this continuing medical education activity for up to 11.75 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association.

THURSDAY, APRIL 29, 1999

9:00 a.m. **"Developing a Compliance Plan That's Right for Your Practice"**

(Optional Workshop - Extra fee required)
See page 421 for more information.

9:00 a.m. **Harold "Bud" Purdy Memorial Golf Tournament**

Hot Springs Country Club

11:30 a.m. **Fifty Year Club Luncheon**

12:00 p.m. **Registration Opens**

12:30 p.m. **Council Meeting**

3:30 p.m. **House of Delegates**

William G. Plested III, MD
Member, Board of Trustees
American Medical Association
Brentwood, California

William G. Plested III, MD, a Thoracic and Cardiovascular surgeon in private practice since 1970, has been a member of the American Medical Association since 1972. He chaired Reference Committee I (Federation Study) at both I-95 and A-96. Dr. Plested was a member of the Special Committee to Study the AMA Board of Trustees, and he is committed to implementing the policies adopted by the House to strengthen the federation and design it to meet the concerns of today's physicians.

Dr. Plested has held positions of leadership throughout his medical career, including President of the California Medical Association and all major offices within the Los Angeles County Medical Association and the CMA. He is passionate in defense of a patient's autonomy and a powerful advocate for the physician's ability to make independent medical judgements. Dr. Plested graduated from the University of Kansas Medical School and completed a surgical internship and residency at the UCLA School of Medicine.

6:00 p.m. **Welcome Reception**
Exhibits Open

FRIDAY, APRIL 30, 1999

8:00 a.m. **Continental Breakfast**
Exhibits Open All Day

CROSSING THE BRIDGE TO

123RD ANNUAL SESSION SCHEDULE

PARK HILTON AND HOT SPRINGS CONVENTION CENTER

8:45 a.m. **"Compliance Planning for Physicians"**

Lisa M. Deaton, RRA
Charleston, South Carolina

Lisa M. Deaton, RRA, is currently the compliance manager for Carolina Family Care of University Medical Associates in Charleston, South Carolina. Ms. Deaton is responsible for Joint Commission on Accreditation of Health Care Organizations (JCAHO) surveys, medical records services, quality management, corporate compliance, medical staff support, and release of information.

Ms. Deaton has served as a medical records consultant to physicians for several health care organizations. She received her Bachelor of Health Sciences degree from the Medical University of South Carolina. She is a certified Registered Records Administrator (RRA) and Tumor Registrar. She is a member of the American Health Information Management Association.

10:00 a.m. **Break**

10:15 a.m. **"Working with Patients who Use Alternative Medicine"**

Margaret W. Arthur, MD
Hoover, Alabama

Margaret W. Arthur, MD, has been in solo practice in Vincent, Alabama since 1988. Dr. Arthur is a Fellow of the American Academy of Family Physicians (1999) and a Diplomate of the American Board of Family Practice (1979 to present). She graduated from the University of Alabama School of Medicine in Birmingham and completed her residency in Family Practice at UASOM in Tuscaloosa.

Dr. Arthur has published articles in publications such as *American Journal of Medicine*, *MASA Review*, *Emergindex* and *Hospital Practice*. She has held teaching positions at the University of Alabama School of Medicine; Union Institute (1997); Clayton School of Natural Healing (1997-1998); and Samford University School of Nursing, Nurse Practitioner Program.

11:45 a.m. **Shuffield Lecture/Luncheon**

1:15 p.m. **Afternoon Break** Exhibits Open

3:00 p.m. **"Health Care Quality Improvement Organizations"**

David G. Schulke
Washington, DC

David G. Schulke is Executive Vice President of the American Health Quality Association, the national trade association for peer review organizations (PROs). He is responsible for advocating the Quality Improvement

Organization (QIO) program in Congress and the Health Care Financing Administration (HCFA), and promoting the QIO program throughout the health care industry. The PROs will soon begin the 6th Scope of Work for the Medicare program, where they will be required to play a larger role in conducting medical reviews for fraud and abuse investigations. Many are concerned that this new contract will focus more resources on punitive actions at the expense of the quality improvement projects that have become the shining star of PRO activities.

Mr. Schulke served as chief health policy advisor to then U.S. Representative (now Senator) Ron Wyden (D-OR), who served on the House Commerce Subcommittee on Health. He also served on the White House Health Reform Task Force's Working Groups on Quality and Budget. Mr. Schulke worked for the U.S. Senate Special Committee on Aging with former Senators John Heinz (R-PA) and David Pryor (D-AR).

6:00 p.m. **Hospitality Hour**

7:00 p.m. **Inaugural Banquet**

9:00 p.m. **President's Reception**

SATURDAY, MAY 1, 1999

8:30 a.m. **"Legislative Report from the 82nd Arkansas General Assembly"**

Z. Lynn Zeno
Little Rock, Arkansas

Z. Lynn Zeno is Director of Governmental Affairs for the Arkansas Medical Society. He will update the AMS membership on the activities of the 82nd Arkansas General Assembly. He will discuss insurance regulations, tort reform and other medical-related bills, which were discussed and acted upon by the state legislature.

Mr. Zeno became the first full-time Director of Governmental Affairs for the Society in 1987 after spending 10 years as an insurance industry lobbyist. He serves as one of 10 members to the American Medical Association's Legislative Advisory Committee. He also serves on the Life and Health Advisory Task Force of the Arkansas Insurance Department.

10:00 a.m. **House of Delegates** Election of Officers

11:30 a.m. **Specialty Meetings** See page 476 for information.

THE YEAR 2000



IMPORTANT INFORMATION



Meeting Registration . . . Return your meeting registration form, with your credit card information or a check made payable to Arkansas Medical Society or AMS:

Arkansas Medical Society
PO Box 55088
Little Rock, AR 72215-5088



Refunds prior to April 21 will be at the full amount. Refunds after April 21 will be charged a \$10 processing fee which will be mailed after the convention.

Need Special Assistance . . . If you are a person with a disability or special needs, please let us know in advance so that we can arrange to make your attendance as convenient and comfortable as possible. Please call the Society office at 501-224-8967 or 1-800-542-1058 to make arrangements.

Spouses and Guests . . . Spouses and guests are invited to attend the AMS annual convention for a registration fee of \$55 (early bird) or \$70 (regular). This allows access to all sessions, exhibit center and social activities.

Hotel Reservations . . . Hotel reservations can be made directly with the Park Hilton. Hotel deadline is **March 28, 1999**. You must identify yourself as being with the Arkansas Medical Society group. After that date, AMS convention rates cannot be guaranteed.

\$70 - Single/Double

Park Hilton
305 Malvern Avenue
Hot Springs, Arkansas 71901
501-623-6600, extention 259

Meeting Attire . . . General sessions, educational programs and other daytime activities - *business casual*. Inaugural Banquet and President's Reception - *coat and tie*.

AMS ALLIANCE MEETING

AMS ALLIANCE MEETING FEES:

\$10.00 for Box Lunch on Friday
\$18.00 for Installation Luncheon on Saturday

FRIDAY, APRIL 30, 1999

7:30 a.m.	Past Presidents' Breakfast
8:00 a.m.	Registration for Meeting
9:00 a.m.	Alliance Meeting
11:45 a.m.	Box Lunch or Shuffield Luncheon*
1:00 p.m.	Alliance Meeting
4:00 p.m.	Wine & Cheese Reception (off-site)

SATURDAY, MAY 1, 1999

8:00 a.m.	Alliance Workshop
11:30 a.m.	Alliance Installation Luncheon
2:00 p.m.	Post-convention Board Meeting

*AMS registration fee required for Shuffield Luncheon.

EXHIBIT CENTER INFORMATION

EXHIBIT CENTER HOURS:

Thursday, April 2	Friday, April 3
6:00 p.m. to 7:30 p.m.	8:00 a.m. to 3:00 p.m.

The Arkansas Medical Society wishes to thank the following organizations for the additional funding for the 123RD AMS Annual Session. With the financial support of these organizations, high quality educational programs for AMS members are made possible.

AMCO (Arkansas Managed Care Organization)
AMS Benefits
Arkansas Center for Sleep Medicine
Arkansas Foundation for Medical Care
Blue Cross Blue Shield of Arkansas
Freemyer Collection System
Hoffman-Henry Insurance Corporation
National Park Medical Center
Regions Bank
Schering Corporation
St. Paul Companies
State Volunteer Mutual Insurance Company

DEVELOPING A COMPLIANCE PLAN THAT'S RIGHT FOR YOUR PRACTICE

On-site registration is not available for this workshop.

Hot Springs Convention Center

Thursday, April 29, 1999

9:00 a.m. - 4:00 p.m.

In conjunction with the AMS Annual Session

It seems that in today's medical environment, simply providing quality medical care and efficient, courteous service to your patients is no longer enough. Medical practices and clinics must now be not only *reactive*, but *proactive* in response to a growing number of fraud and abuse allegations by federal agencies.

One of the best ways to protect yourself, your physicians, and your practice is to develop a compliance plan. Don't wait for an investigation to begin.

Assist your office staff, physicians, and yourself by developing a realistic compliance plan and program that is suitable to federal and state regulations. Establish clear protocols and policies to aid in protecting your practice from sanctions and fines.

In this workshop, participants will review:

- Federal and state sentencing guidelines
- How to develop a code of conduct
- Implementing compliance plans
- Auditing and monitoring compliance for fraud and abuse

Target Audience:

Physicians, office managers, business administrators, practice administrators, especially in medical practices with fewer than 20 physicians.

Registration Fees:

(Complete the registration form on page 422)

Lunch is provided.

AMS Member or Staff: \$195 per person

Non-Member or Staff: \$245 per person

CME programs joint-sponsored by St. Joseph's Regional Health Center.

St. Joseph's Regional Health Center is accredited by the Arkansas Medical Society to provide continuing medical education for physicians. St. Joseph's Regional Health Center designates this continuing medical education activity for up to six credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association.

Workshop Outline

Requirements for a Compliance Plan

- Mission statement
- Compliance policy
- 1992 federal sentencing guidelines
- Training
- Auditing
- Reporting format

Developing Your Mission Statement

- Overall development
- Content requirements
- Implementation process

Developing Your Compliance Policy

- Overall development by specialty
- Context requirements
- The implementation process

The Seven Steps: A Time Line for Compliance

- Rules and procedures/code of conduct check list
- Assignment of personnel to oversee the compliance effort: job description requirements
- Delegation of discretionary authority
- The training process
- Monitoring and auditing
- Enforcement
- Appropriate response to detection of an offense

Utilizing Your Resources

- Reporting your findings within the office
- Developing a "hot line"

Implementing the Plan

- Physician protocol requirements
- Senior employee requirements
- New employee requirements

About the Instructor:

Lisa M. Deaton, RRA, is currently the compliance manager for Carolina Family Care of University of Medical Associates in Charleston, South Carolina. Ms. Deaton is responsible for Joint Commission on Accreditation of Health Care Organizations (JCAHO) surveys, medical records services, quality management, corporate compliance, medical staff support, and release of information.

Ms. Deaton has served as a medical records consultant to physicians for several health care organizations. She received her Bachelor of Health Sciences degree from the Medical University of South Carolina. She is a certified Registered Records Administrator (RRA) and Tumor Registrar. She is a member of the American Health Information Management Association.

123RD AMS ANNUAL SESSION REGISTRATION FORM

EARLY BIRD REGISTRATION ENDS APRIL 9, 1999

PARK HILTON - HOT SPRINGS CONVENTION CENTER - APRIL 29 - MAY 1, 1999

PHYSICIAN OR MEDICAL STUDENT (Please Print) _____

SPOUSE OR GUEST (If Attending Any AMS Events) _____

CLINIC MANAGER _____

MAILING ADDRESS-CITY-STATE-ZIP _____

PHONE _____ FAX _____

REGISTRATION FEES

The fee includes entrance into the Exhibit Center and Exhibit Center Breaks, CME Hours, Shuffield Luncheon, Inaugural Banquet and President's Reception.

	<u>Early Bird (By April 9)</u>	<u>Regular</u>
AMS Members -----	\$90 -----	\$125 -----
AMS Past President -----	\$70 -----	\$105 -----
AMS Spouse -----	\$55 -----	\$70 -----
Resident or Spouse -----	\$5 -----	\$10 -----
Medical Student or Spouse -----	\$5 -----	\$10 -----
Non-Member -----	\$110 -----	\$145 -----

OPTIONAL EVENTS (Additional Fees Required)

Compliance Workshop (Thursday) - On-site registration is not available.

AMS Member ----- \$195

Non-Member ----- \$245

Golf Tournament ----- \$60

Alliance Box Lunch (Friday) ----- \$10

Alliance Installation Luncheon (Saturday) ----- \$18

REGISTRATION FEE (Required): \$ _____

OPTIONAL FEES: \$ _____

TOTAL DUE: \$ _____

METHOD OF PAYMENT:

_____ CHECK (Made payable to AMS)

_____ VISA

_____ MASTERCARD

CREDIT CARD INFORMATION:

Cardholder's Name (print): _____

Expiration Date: _____

Credit Card Number: _____

Cardholder's Signature: _____

PLEASE MAIL REGISTRATION TO: Arkansas Medical Society, PO Box 55088, Little Rock, AR 72215-5088.
Registrations made by credit card may be faxed to 501-224-6489. Any questions, call 501-224-8967 or 1-800-542-1058.

Medicine in the News

Arkansas Health Care Access Foundation

As of February 1, 1999, the Arkansas Health Care Access Foundation has provided free medical service to 15,032 medically indigent persons, received 28,339 applications and enrolled 54,761 persons. This program was established in 1989 and has 1,926 volunteer health care professionals including medical doctors, dentists, hospitals, home health agencies and pharmacists. These providers have rendered free treatment in 69 of the 75 counties. For more information on this program, please call 800-950-8233 or 501-221-3033.

New AMA Booklet Series Explains Medicare+Choice

As a part of its ongoing commitment to providing service for the medical profession and strengthening the patient-physician relationship, the AMA is developing a series of booklets to help all physicians and their patients understand the Medicare+Choice program.

The new Medicare+Choice program, created by the government in 1997 and scheduled for implementation this month, is designed to offer Medicare patients a wider range of health care coverage choices,

"The new Medicare system embraces many of the principles the AMA has been advocating for years - including expanded choice for our patients," said AMA. President Nancy W. Dickey, MD. The new booklets offer help to America's physicians as they begin implementing the Medicare+Choice program within their practices. The AMA hopes that the complimentary booklets will make the transition to this new system as easy as possible for physicians.

The first of three booklets in the series, "What is Medicare+Choice and Where Do Physicians Fit In?" focuses on the basics of Medicare+Choice. The booklet details differences between the "original" Medicare and the new options available under Medicare+Choice. It also describes various aspects of the new program, including contracts between plans and physicians, payment issues and rules on physician-plan relations.

Two future companion volumes, "Medicare+Choice, What You Should Say or Not Say to Your Patients" and "What You Need to Know About Providing Services to Medicare+Choice Patients," are scheduled for publication early this year.

During this period of transition and new uncer-

tainty for Medicare, the AMA has been active in voicing the concerns of physicians and their patients.

As Medicare+Choice evolves and as the federal government continues to work out the details of the program the AMA will keep physicians apprised of these important changes.

The first booklet is available on the AMA Web site at <http://www.ama-assn.org/ad-com/whatmed.htm>. For additional information or to order a copy of this booklet, AMA members may call (800) 262-3211.

Physician Use of the Internet

The American Medical Association (AMA) has published a new study designed to determine the penetration, and identify patterns of usage of the Internet by physicians.

The study reveals that only twenty percent of physicians use computers to access the Internet. The projected number of physician users of the web is between 120,000 and 130,000, based on extrapolated data. That number coincides with the demographics reported by at least one media website, Medline, which

Kill Your "Year 2000 Bug"

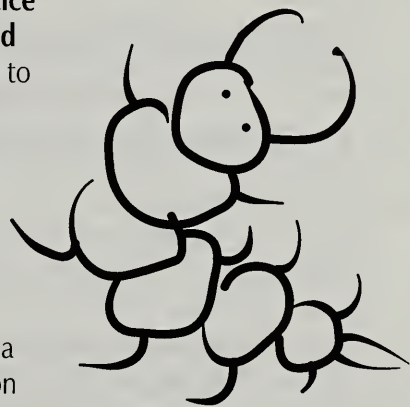
Move your **practice management and medical records** to a Microsoft® Windows-based system and solve your Year 2000 problems—all at the same time.

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1-800-383-0444 + www.ancillea.com

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CONSULTING COMPANY



claims 125,000 registered physicians.

Of physicians using the web, 42 percent access it daily, while 36 percent go online two or three times a week. The average is about five days a week among physician users. Of particular interest, 62 percent find the web extremely or very useful as a resource for medical information and 42 percent utilize it for drug information.

Reasons for using the Internet varied widely, from access to medical information sources such as MEDLINE (83%), to collecting travel information (72%) to obtaining product information (65%). Other reasons include professional association communications, surfing the Net/entertainment, drug information and collecting financial news. Only 7 percent of physicians said they communicated test results to patients via the Internet and 6 percent reported that they had used the Internet for claims processing.

The data collected shows that overall, 58 percent of physicians interviewed are non-computer users.

Provided by The Alabama MD, the Medical Association of the State of Alabama

National Clinical Trial Evaluates the Benefit of Adding Hormonal Therapy to Radiation After Prostate Surgery

The Radiation Therapy Oncology Group (RTOG) is now examining, by a randomized clinical trial, the effectiveness of adding Casodex™ a hormonal therapy agent, to radiation for prostate cancer patients with rising PSA (prostate specific antigen) following radical surgery. Such rises in the PSA indicate recurrence of the disease.

Casodex™ (bicalutamide) is a new nonsteroidal anti-androgen. Although anti-androgens block the stimulation of male hormones on normal and cancerous prostate cells, they have been shown to be less likely to impair a patient's libido and potency than other hormonal therapies.

William U. Shipley, M.D., study chairman, said the clinical trial will "evaluate radiation therapy with or without high-dose Casodex™ in prostate cancer patients who were treated with radical prostatectomy and in whom the cancer had spread microscopically outside the prostatic capsule and who subsequently had a rising PSA."

Dr. Shipley, chair of genitourinary oncology, Department of radiation Oncology at The Massachusetts General Hospital, Boston, MA, noted that salvage radiation alone for these patients has potentially cured 30-45 percent of them. This clinical protocol evaluates whether high-dose Casodex™ will increase the cure rate by at least another 10-15 percent. This Phase III trial is a double-blinded, placebo-controlled study.

RTOG is funded by the National Cancer Institute

and managed by the American College of Radiology

The high dose of Casodex™ while well tested for safety in more than 9,000 patients, not now available or approved as a standard therapy following radiation, Dr. Shipley said.

Earlier RTOG trials have studied the potential benefit of adjuvant hormonal therapy and the benefit of maximum androgen blockade as a new adjuvant hormonal therapy.

The results of these trials combining radiation and hormonal therapy compared to radiation therapy alone are very encouraging for increasing survival in some subsets of patients, according to Dr. Shipley, who is professor of radiation oncology at Harvard Medical School.

RTOG is a federally funded cancer clinical trials cooperative group, which carries out multi-disciplinary research nationwide. It is a major clinical research component of the American College of Radiology. For further information about RTOG clinical trials, please call Nancy Smith at 215-574-3205.

Provided by news release from RTOG

Aetna U.S. Healthcare Verdict in Antitrust Case: Pay \$1.86 Million

This week, a federal jury returned a \$1.86 million verdict against Aetna U.S. Healthcare, ruling that the company "used hardball tactics" to strong-arm a drug store chain into using U.S. Healthcare's administrative services. The jury awarded Brokerage Concepts, Inc. \$105,000 in compensatory damages and \$1.25 million in punitive damages against U.S. Healthcare, in addition to \$500,000 in punitive damages against the former head of U.S. Healthcare's pharmacy division.

The federal case stems from a 1996 ruling that U.S. Healthcare violated antitrust laws by forcing a drugstore chain to switch its current health plan administrator to U.S. Healthcare (before its merger with Aetna). The jury in the 1996 case awarded the plaintiff, Brokerage Concepts, Inc., \$1.2 million. The U.S. Court of Appeals for the Third Circuit overturned the verdict last April. In the more recent trial, the jury, after deliberating for three days, decided that U.S. Healthcare had "tortiously interfered" with Brokerage Concept's business relationship with the drugstore chain.

This was the second blow to Aetna U.S. Healthcare in two weeks. Last week, Aetna was ordered to pay a \$120 million judgement after a jury decided that the carrier failed to cover potentially life-saving treatment. In an op-ed piece in the January 26 edition of *The Los Angeles Times*, Jamie Court of Consumers for Quality Care stated, "The jury's message was that Aetna cannot ignore its own doctors' recommendations and must act more quickly when a patient's life hangs in the balance ... The verdict was

a repudiation of a common HMO tactic of refusing to authorize treatment in a timely manner and then blaming the patient for doing what he or she must do to stay alive." Court also commented on Aetna U.S. Healthcare's CEO Richard Huber's comment after the ruling that "That's no way to get justice and certainly no way to manage a trillion dollar industry." Court stated, "Aetna's board of directors would do well to consider it is precisely Huber's attitude that the company is above justice that has gotten Aetna into trouble."

Provided by EVPgram, Medical Society of the State of New York

National Guideline Clearing House

December 1998. It is our pleasure to inform you that the National Guideline Clearinghouse (NGC) is up and running. This unique Internet-based tool became operational on December 15, 1998 at <http://www.guideline.gov>. The NGC was developed by AHCPR, in partnership with the American Medical Association (AMA) and the American Association of Health Plans (AAHP), to be a resource for physicians, nurses, and other health care professionals.

To date, the NGC contains 200 evidence-based clinical practice guidelines- submitted by over 50 health care organizations and other entities. When the NGC is formally launched to the public in mid-January 1999, we expect to have close to 400 clinical practice guidelines. The NGC will continue to expand and improve as more guidelines are regularly added to this electronic repository.

All submissions are abstracted into a standardized format that enables users to compare clinical practice guideline recommendations more quickly than ever before. After the first five years of operation, we expect this repository to contain 3,500 clinical practice guidelines. NGC's electronic database will be updated continually, to reflect the most recent clinical practice guidelines.

You can browse the NGC database three different ways: by disease/condition; by treatment/intervention; or by the name of the submitting organization. You also will be able to conduct simple and detailed searches. In addition, NGC allows you to create tabular comparisons of guideline abstracts and provides syntheses of guidelines that cover similar topics, noting areas of agreement and disagreement.

If you have questions or comments about the NGC or have questions about how to submit guidelines to NGC, please contact Ms. Jean Slutsky, NGC Project Officer, at the Agency for Health Care Policy and Research by calling (301) 594-4042 or by e-mail at: jslutsky@ahcpr.gov

Provided by Dept. of Health and Human Services, Agency for Health Care Policy and Research.

Survey Shows Patients Worry About Confidentiality of Medical Records

Computerization of medical records is seen as the most serious threat to privacy, according to a survey of 1,000 Americans aged 18 and over. Most of the sample (54%) were not threatened by disclosure by health care professionals or health plan officials but worried about hackers breaking to the computer system. Six in 10 would not grant access to a hospital offering preventive care or to an employer who was considering them for a new job. An overwhelming amount (70%) would not allow drug companies to access their records for marketing new drugs and health care products. A solid majority (70%) said they trust physicians and hospitals to keep personal information confidential all or most of the time.

Fifteen percent of the sample surveyed said they had taken the following steps to keep their medical information confidential: gone to another physician or paid out-of-pocket (when insured) to avoid disclosure; did not seek care to avoid disclosure to an employer; gave inaccurate or incomplete medical history; asked a physician not to write down the problem or to record a less serious or embarrassing condition.

Provided by EVPgram, Medical Society of the State of New York

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HMO Having Problem??

Here's How You Can Tell...

As if keeping your own house in order isn't enough, doctors across the nation face an added challenge: keeping a close eye on the HMOs with which they do business.

HMOs In The Red

HMO enrollment continues to rise, but profits generally are declining. As a result, HMOs from coast to coast are operating in the red. HMOs that are making money are operating on razor-thin margins. More of the same seems likely unless HMOs raise their rates, which will be a difficult sell among both employers and consumers.

If an HMO fails, it's likely to have a significant impact on your revenue. Here are some ways to monitor the financial health of the HMOs in your practice:

✓ Carefully analyze your accounts receivable on a monthly basis. If revenues decline, it could be a result of tardy reimbursements from an HMO. Generally, you should expect to be paid within 60 days. If an HMO takes longer, it may indicate cashflow problems.

✓ Examine claims data. Are an unusual number of claims being denied? This could be an indication that an HMO is strapped for cash.

✓ Review external financial information. HMOs are required to file financial information with state insurance regulators; this is public information. Beware of HMOs with an unusually low average premium cost. They may be trying to buy market share and may face future financial difficulties.



Consider the HMO's medical loss ratio, reflecting the percentage of premiums directed at patient care. The ratio should be in the 83% to 85% range. Also, be wary of plans with less than 50,000 members.

Savvy Contracting

You can do a lot to ensure a healthy relationship with an HMO by savvy contracting. It sounds simple, but physicians should read and understand all of their managed care contracts.

Check the American Medical Association's (AMA) model managed-care contract. The right contract language can protect you if the payer goes out of business or refuses to pay.

Payers often insist on using standard contracts, claiming they have little discretion to modify them. If you run into that obstacle, try making changes through addenda. If possible, the contract should allow you to terminate a contract early in the event of payment delays, non-payment, or unfounded claim denials. Such a clause may be the most practical way to cut your losses. In addition, add a contractual provision that requires the payer to provide financial information throughout the contract term, thereby giving you early warning of impending financial peril.

The bottom line? Be aware. Your medical practice should not have to pay the price for a failing HMO.

Neal, Scouten & McConnell, P.C., Certified Public Accountants, Chattanooga, TN

*Furnished by Russ Miller, Sr. Vice President,
Tennessee Medical Association*

\$1,000 AVAILABLE FOR HISTORICAL RESEARCH IN 1999

The History of Medicine Associates, an organization created to stimulate interest in the history of the health sciences in Arkansas and to promote the collection of the UAMS Library's Historical Research Center, is offering a \$1,000 Research Award to an individual interested in preparing a paper on any aspect of Arkansas health sciences.

Individuals should make use of the resources in the UAMS Historical Research Center collection when preparing the paper. The Award may be used for travel, housing, resource materials, and research or secretarial assistance.

There is no required application form. Applicants should send a proposal (summary) of the paper's topic, a proposed budget, and an anticipated completion date to the address given below. Deadline for applications is May 31, and the winner will be announced in June. Any questions, contact Ms. Walls at 501-686-6733 or email mannedwinawalls@exchange.uams.edu. Send proposals to: Edwina Walls Mann, Treasurer, History of Medicine Associates, UAMS Library, 4301 W. Markham St. #586, Little Rock, AR 72205-7199.

AMS Newsmakers

Physician's Recognition Award

The Physician's Recognition Award is awarded each month to physicians who have completed acceptable programs of continuing education.

The AMS recipients for the month of December 1998 are: **Lester T. Alexander**, Pine Bluff; **John K. Phillips**, Jonesboro; **David H. Roberts**, Mountain Home.

The AMS recipients for the month of January 1999 are: **James B. Jones**, Pine Bluff; **Joseph Andrew Norton**, Little Rock; **J. Mayne Parker**, Little Rock; **Bharathi Rangaswami**, Helena; **David Tapley**, Hot Springs; **A. Lawrence Travis**, Van Buren; **C. Eugene Watermann**, Hot Springs; **Michael C. Young**, Prescott.

William N. Jones of Little Rock, was presented with the Legion of Honor Humanitarian Award on February 17, 1999 in Little Rock by The Chapel of Four Chaplains. This award recognizes persons who have rendered selfless service to humanity without regard to race, religion or creed.

Reception Held for Representative Billy Joe Purdom

The Boone County Medical Society's Governmental Affairs Committee hosted a reception for District 39 Representative Billy Joe Purdom upon his retirement from the House of Representatives. Mr. Purdom was not eligible to run again due to term limits. He served Marion County, Northwest Boone County and a portion of Searcy County from 1985 through 1998.

Following presentations of tokens of appreciation by Dr. Tom Langston, Boone County Medical Society President, and Mr. Bob Barker, Chairman of the Board of Directors of North Arkansas Regional Medical Center. Mr. Purdom introduced Jimmy "Red" Milligan as his successor who pledged to continue his efforts to improve the health and welfare of the constituents of District 39.

Dr. Kenneth Threet, past-chairman and current member of the Board of Director, presented a brief history of the development of the Claude Parrish Radiation Therapy Institute and expressed appreciation to Rep. Purdom's guidance in obtaining \$700,000 matching money from the state of Arkansas.

Dr. Joe Bennett, former Director of Radiation Therapy, his wife Mary Jean, Dr. Helen Kim, radiation oncologist, and Mr. Dan Allen, Chairman of the ParRTI Foundation Board, representatives of the NARMC Administration, as well as members of the Boone County Medical Society extended thanks and best wishes to Mr. Purdom. In addition, they expressed their willingness to work with Mr. Milligan.



Left to Right; Dr. Sam Scroggins, Dr. Joe Bennett, Representative Billy Joe Purdom, Dr. Jose Padilla, Dr. Ken Collins, Dr. Tom Langston, Dr. Bob Langston and Dr. Kenneth Threet



Dr. Tom Langston, Boone County Medical Society President and Representative Billy Joe Purdom



Left to Right; Dr. Sam Scroggins, Mary Jean Bennett, Dr. Joe Bennett, Representative Jimmy "Red" Milligan, Representative Billy Joe Purdom, Dr. Jose Padilla, Dr. Smith



Send your accomplishments and photo for consideration in *AMS Newsmakers* to:

AMS - Journal Editor
PO Box 55088

Little Rock, AR 72215-5088

Fifty Year Club Luncheon

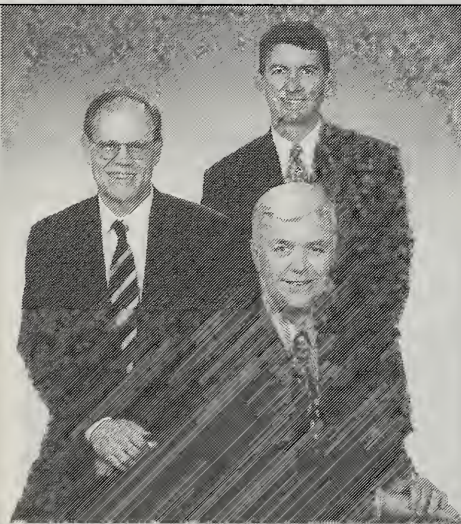
The Fifty Year Club is composed of physicians who have held a license to practice medicine for fifty years and who have loyally and effectively served the community and, by skill and devotion to high ideals, upheld and maintained the standards of the medical profession.

The Society will host a luncheon for members of the Fifty Year Club at 11:30 a.m., Thursday, April 29, 1999, at the Park Hilton Hotel in Hot Springs, Arkansas.

The physicians who are eligible for the Fifty Year Club this year are:

Robert L. Baker, M.D.
John H. Barrow, Jr., M.D.
Kenneth E. Beaton, M.D.
Frederick B. Berry, M.D.
Vance J. Crain, M.D.
Billy D. King, M.D.
L. V. Ozment, M.D.
Donald I. Purcell, M.D.
Walter G. Selakovich, M.D.
Bernard C. Smith, M.D.
Eugene J. Towbin, M.D.
Charles F. Wilkins, Jr., M.D.

Mountain Home
Helena
Wynne
Roland
Wynne
Jonesville, Louisiana
Camden
Paragould
Little Rock
Bradford
Little Rock
Russellville



Clockwise (L-R):
Jim Strawn, Stephen Chaffin, Bill Smith

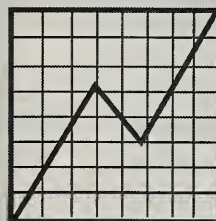
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#2 OUR PASSION:

See #1 above.



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1999 House of Delegates

The opening session of the House of Delegates of the Arkansas Medical Society will begin at 3:30 p.m. on Thursday, April 29. Speaker of the House, Anna Redman, M.D., will preside. All items of business to be considered by the House must either be printed in the convention issue of *The Journal* or submitted to the headquarters office in writing twenty days prior to the meeting. Any new business proposed during the session of the House of Delegates must have a two-thirds vote of attending delegates for introduction.

The following will be seated at the House of Delegates meeting during the 1999 Annual Session:

Officers (ex-officio)

Kevin Beavers, Russellville	Vice Speaker
Carlton Chambers, Little Rock	Secretary
Charles Logan, Little Rock	Immediate Past President
Dwight Williams, Paragould	Treasurer
Michael Moody, Salem	President
Lloyd Langston, Pine Bluff	President-elect
Anna Redman, Pine Bluff	Speaker
Steve Thomason, Little Rock	Vice President

Councilors

District 1:	Roger Cagle	Paragould
	Joe V. Jones	Blytheville
	Joe Stallings	Jonesboro
District 2:	Lloyd Bess	Batesville
	Daniel Davidson	Searcy
District 3:	Parthasarathy Vasudevan	Helena
	Dennis Yelvington	Stuttgart
District 4:	John O. Lytle	Pine Bluff
	Harold Wilson	Monticello
District 5:	William Dedman	Camden
	Fred Murphy	Magnolia
District 6:	Samuel Peebles	Nashville
	Michael Young	Prescott
District 7:	Robert McCrary	Hot Springs
	Brenda Powel	Hot Springs
District 8:	Joseph Beck	Little Rock
	C. Reid Henry, Jr.	Little Rock
	Anthony Johnson	Little Rock
	William Jones	Little Rock
	Fred Nagel	N. Little Rock
	J. Mayne Parker	Little Rock
	Edward Saer	Little Rock
	Samuel Welch	Little Rock
	John L. Wilson	Little Rock
District 9:	Anthony Hui	Fayetteville
	William McGowan	Springdale

District 9:	Jan Turley	Rogers
	Oliver Wallace	Green Forest
District 10:	Mike Berumen	Fort Smith
	James Henry	Fort Smith
	Gerald Stolz	Russellville
	Paul Wills	Fort Smith

Past Presidents (ex-officio)

A. E. Andrews, Jr.	Texarkana
C. Stanley Applegate, Jr.	Springdale
Glen F. Baker	Little Rock
John P. Burge	Lake Village
John Crenshaw	Pine Bluff
Asa A. Crow	Paragould
C. Randolph Ellis	Malvern
Morriss M. Henry	Fayetteville
John M. Hestir	DeWitt
William Jones	Little Rock
W. Ray Jouett	Little Rock
Albert S. Koenig, Jr.	Fort Smith
James M. Kolb, Jr.	Russellville
Kemal E. Kutait	Fort Smith
J. Larry Lawson	Paragould
Charles Logan	Little Rock
Ken Lilly	Fort Smith
C. C. Long (Honorary)	Fort Smith
Joseph A. Norton	Little Rock
Ben N. Saltzman	Mountain Home
Purcell Smith, Jr.	Little Rock
H. W. Thomas	Dermott
T. E. Townsend	Pine Bluff
George Warren	Little Rock
Charles F. Wilkins, Jr.	Russellville
John P. Wood	Mena
George F. Wynne	Warren

Ex-officio members shall have the power of voting on all subjects except the election of officers

1999 Delegates

as submitted by county

County	Delegate	Alternate			
Arkansas (1)			Pulaski (39)- cont.	Brad Baltz	Shelly Baldwin
Ashley (1)	Don Toon	Barry Thompson		Reginald Barnes	Laurie Barber
Baxter (2)				Ray Biondo	Joe Buford
Benton (4)				David Bourne	Janet Cathey
Boone (2)	Sharron Leslie	Charles Ledbetter		Bob Cogburn	David Dean
	Robert Langston			Michael Cope	Ashley Deed
Bradley (1)	Joe Wharton	Kenneth Purvis		David Coussens	Gregory Dwyer
Carroll (1)				Philip Deer, III	Jay Flaming
Chicot (1)				Shirley DesLauriers	Eric Fraser
Clark (1)	Noland Hagood	Mark Jansen		Bradley Diner	David Gilliam
Cleburne (1)				Thomas Eans	Michael Glidden
Columbia (1)	John Alexander	Thomas Pullig		Jim English	Lawson Glover
Conway (1)				Thomas Frazier	James Hagans
Craigh/Poinsett(7)	Joe Stallings			Steve Hodges	James Hagler
	Timothy Dow			Jim Ingram	Edwin Hankins
Crawford (1)				Thomas Jansen	Thomas Hart
Crittenden (2)	G. Edward Bryant			Carl Johnson	J.Timothy Hodges
	Scott Ferguson			Gail Jones	Jerry Holton
	Robert Hayes			Stanley Kellar	Harold Hutson
Cross (1)				David King	Ben Johnson
Dallas (1)				Marvin Leibovich	Dianne Johnson
Desha (1)				Stephen Magie	John Jones
Drew (1)				Valerie McNee	Joan Kyle
Faulkner (2)	Randal Bowlin	John D. Smith		Rickey Medlock	Kenneth Martin
	Ben Dodge	Phillip Stone		Tena Murphy	John Meadors
Franklin (1)				Fred Nagel	Keith Mooney
Garland (6)				George Norton	James Morse
Grant (1)	Jack Irvin	Clyde Paulk		Carl Raque	Jim Norton
Greene/Clay (2)				John Redman	Michael Roberson
Hempstead (1)				Ashley Ross	Ian Santoro
Hot Spring (1)				Deanna Ruddell	Claudia Tolleson
Howard/Pike (1)	Robert Sykes	Sam Peebles		Frank Sipes	
Independence (2)	J. R. Baker	Jeff Angel		Kemp Skokos	
	William Waldrip	Rick Van Grouw		Steven Strode	
	M. A. Chauhan	Roger Green		Joseph Ward	
Jackson (1)					
Jefferson (5)			Randolph (1)		
Johnson (1)			Saline (2)		
Lafayette (1)	Bradley Harbin	Colin Bailey	Sebastian (11)	Randy Ennen	Allen Beachy
Lawrence (1)	Robert Quevillon	Ted Lancaster		R. Cole Goodman	Mike Berumen
Lee (1)				Michael Gwartney	R. Peter Fleck
Little River (1)				David Hunton	David McClanahan
Logan (1)				Greg Jones	Steve Nelson
Lonoke (1)				Claire Price	Stephen Seffense
Medical Student (1)	Sarah Robertson	Brent Stewart		Jerry Stewart	Michael Standefer
Miller (3)	John Ford			John Swicegood	Eric Taft
	F. E. Joyce			Timothy Waack	
	Joseph Robbins			John Wells	
Mississippi (1)			Sevier (1)		
Monroe (1)			St. Francis (1)		
Nevada (1)			Tri-County (1)		
Ouachita (1)			Union (3)		
Phillips (1)	Marion McDaniel	L. J. Pat Bell, Sr.	Van Buren (1)	Harry Starnes	John Hall
Polk (1)	Thomas Tinnesz	Nicholas Cappello	Washington (8)		
Pope (3)	Russell Allison	Rick Harrison	White (3)		
	Michael Bell	Vickie Henderson	Woodruff (1)		
	David Murphy		Yell (1)	James Maupin	Philip Tippin
Pulaski (39)	William Ackerman	Dana Abraham			
	D. B. Allen	James Adametz			

1999 House of Delegates

First Meeting, House of Delegates 3:30 p.m., Thursday, April 29, 1999 Anna Redman, M.D., Speaker

1. Call to order
2. Introduction of guests
3. Adoption of minutes of the 122nd Annual Session as published in the June issue of *The Journal of the Arkansas Medical Society*.
4. Memorials
5. Presentations
6. Old Business
7. New Business
All reports, resolutions, and other items of business received by the headquarters office twenty days prior to the meeting shall be included in the agenda. Any items of business received after April 9th, must have two-thirds consent of attending delegates before introduction.
8. Announcement of vacancies on the Arkansas State Medical Board and the Arkansas State Board of Health.
9. Address by representative from the American Medical Association
10. Recess until Saturday

Final Meeting, House of Delegates 10:00 a.m., Saturday, May 1, 1999 Anna Redman, M.D., Speaker

1. Call to order
2. Election of officers. Nominations as submitted by the Nominating Committee:
President-elect: Gerald Stolz, M.D., Russellville
Vice President: Steven Thomason, M.D., Little Rock
Treasurer: Dwight Williams, M.D., Paragould
Secretary: Carlton Chambers, M.D., Little Rock
Speaker of the House: Anna Redman, M.D., Pine Bluff
Vice Speaker of the House: Kevin Beavers, M.D., Russellville
Delegates to the AMA:
J. Larry Lawson, M.D., Paragould (Dr. Lawson will finish the uncompleted term (1/1/98 - 12/31/99) of Dr. Weber and from 1/1/2000 to 12/31/2001)
Alternate Delegate to the AMA:
Michael Moody, M.D., Salem (Dr. Moody

will finish the uncompleted term (1/1/98 - 12/31/99) of Dr. Larry Lawson and from 1/1/2000 to 12/31/2001)

Councilors:

- District 1: Joe Stallings, M.D., Jonesboro
Joe Jones, M.D., Blytheville
- District 2: Lloyd Bess, M.D., Batesville
- District 3: Dennis Yelvington, M.D., Stuttgart
- District 4: John Lytle, M.D., Pine Bluff
- District 5: William Dedman, M.D., Camden
- District 6: Michael Young, M.D., Prescott
- District 7: Brenda Powell, M.D., Hot Springs
- District 8: Joseph Beck, M.D., Little Rock
C. Reid Henry, Jr., M.D., Little Rock
William Jones, M.D., Little Rock
J. Mayne Parker, M.D., Little Rock
Anthony Johnson, M.D., Little Rock
Samuel Welch, M.D., Little Rock
- District 9: Anthony Hui, M.D., Fayetteville
Jan Turley, M.D., Rogers
- District 10: Robert E. Sanders, D.O., Fort Smith
Mike Berumen, M.D., Fort Smith
- Medical Student: Karen McNiece, Little Rock
3. Address by the President of the Arkansas Medical Society, Michael Moody, M.D., Salem
 4. Reports from Reference Committee
 5. Report of the Council, Gerald Stolz, M.D., Chairman (report covers meetings held during the annual session.)
 6. New Business
Announcement of nominees for the Arkansas State Medical Board and Arkansas State Board of Health
Other new business

Vacancies in State Boards Sixth Congressional District Position, Arkansas State Medical Board

A vacancy will occur December 31, 1999, in the Sixth Congressional District position of the Arkansas State Medical Board. The term of office will be for eight years. Members from the counties in the old Sixth Congressional District are urged to meet immediately following the adjournment of the House of Delegates on Thursday to vote for nominees. Nominations should be reported to the Society personnel immediately following the caucuses.

Dr. David Jacks of Pine Bluff is serving in this position and he is eligible to succeed himself.

The old Sixth Congressional District consist of the following counties: Arkansas, Chicot, Cleveland,

Dallas, Desha, Drew, Garland, Grant, Hot Spring, Jefferson, Lincoln, Lonoke, and Saline.

Third Congressional District Position, Arkansas State Board of Health

A vacancy will occur December 31, 1999, in the Third Congressional District position of the Arkansas State Board of Health. The term of office will be for four years. Members from the counties in the Third Congressional District are urged to meet immediately following the adjournment of the House of Delegates on Thursday to vote for nominees. Nominations should be reported to the Society personnel immediately following the caucuses.

Linda McGhee, M.D., of Fayetteville, is currently serving in this position and she is eligible to succeed herself.

The Third Congressional District consist of the following counties: Baxter, Benton, Boone, Carroll, Crawford, Franklin, Johnson, Logan, Madison, Marion, Newton, Polk, Pope, Sebastian, Scott, and Washington.

Fourth Congressional District Position, Arkansas State Board of Health

A vacancy will occur December 31, 1999, in the Fourth Congressional District position of the Arkansas State Board of Health. The term of office will be for four years. Members from the counties in the Fourth Congressional District are urged to meet immediately following the adjournment of the House of Delegates on Thursday to vote for nominees. Nominations should be reported to the Society personnel immediately following the caucuses.

John W. Smith, M.D., of Hot Springs, is currently serving in this position and he is eligible to succeed himself.

The Fourth Congressional District consist of the following counties: Ashley, Bradley, Calhoun, Chicot, Clark, Cleveland, Columbia, Dallas, Desha, Drew, Garland, Grant, Hempstead, Hot Spring, Howard, Jefferson, Lafayette, Lincoln, Little River, Miller, Montgomery, Nevada, Ouachita, Pike, Sevier, and Union.

Member-at-Large Position, Arkansas State Board of Health

A vacancy will occur December 31, 1999, in the Member-at-Large position of the Arkansas State Board of Health. The term of office will be for four years. Members from the Arkansas Medical Society Nominating Committee are urged to meet immediately following the adjournment of the House of Delegates

on Thursday to vote for nominees. Nominations should be reported to the Society personnel immediately following the caucuses.

Robert D. Miller, M.D., of Helena, is currently serving in this position and he is eligible to succeed himself.

Council Meeting

The Council will meet on Thursday, April 29, at 12:30 p.m.

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Nominating Committee

Paul Wallick, M.D., Chairman

The members of the 1998/1999 Nominating Committee are Drs. J. R. Baker, C. Reid Henry, Jr., Anthony Hui, Joe Jones, Marion McDaniel, Fred Murphy, Timothy Webb, Paul Wills, Michael Young, and Paul Wallick, Chairman.

The Nominating Committee met on Saturday, January 9, 1999 and by conference call on Tuesday, January 26, 1999. We wish to present to the Society the following nominees:

President-elect: Gerald Stolz, M.D., Russellville

Vice President: Steven Thomason, M.D., Little Rock

Treasurer: Dwight Williams, M.D., Paragould

Secretary: Carlton Chambers, M.D., Little Rock

Speaker of the House: Anna Redman, M.D., Pine Bluff

Vice Speaker of the House: Kevin Beavers, M.D., Russellville

Delegates to the AMA:

J. Larry Lawson, M.D., Paragould (Dr. Lawson will finish the uncompleted term (1/1/98 - 12/31/99) of Dr. Weber and from 1/1/2000 to 12/31/2001)

Alternate Delegate to the AMA:

Michael Moody, M.D., Salem (Dr. Moody will finish the uncompleted term (1/1/98 - 12/31/99) of Dr. Larry Lawson and from 1/1/2000 to 12/31/2001)

Councilors:

- District 1: Joe Stallings, M.D., Jonesboro
Joe Jones, M.D., Blytheville
- District 2: Lloyd Bess, M.D., Batesville
- District 3: Dennis Yelvington, M.D., Stuttgart
- District 4: John Lytle, M.D., Pine Bluff
- District 5: William Dedman, M.D., Camden
- District 6: Michael Young, M.D., Prescott
- District 7: Brenda Powell, M.D., Hot Springs
- District 8: Joseph Beck, M.D., Little Rock
C. Reid Henry, Jr., M.D., Little Rock
William Jones, M.D., Little Rock
J. Mayne Parker, M.D., Little Rock
Anthony Johnson, M.D., Little Rock
Samuel Welch, M.D., Little Rock
- District 9: Anthony Hui, M.D., Fayetteville
Jan Turley, M.D., Rogers
- District 10: Robert E. Sanders, D.O., Fort Smith
Mike Berumen, M.D., Fort Smith
- Medical Student: Karen McNiece, Little Rock

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*those physicians who volunteer
 through the Arkansas Health
 Care Access Foundation,
 Thank You!*
*As you can see from a sampling of
 letters we have received, your
 involvement in our program is
 appreciated and in many
 cases life-saving.*

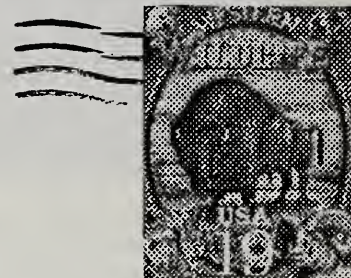
It has been three days since you sent me to the doctor and I have a ways to go to be 100%, but I can breathe and walk across the room now. I had given up hope almost, and I remembered Arkansas Health Care. The doctor gave me two of the medicines I needed and the pharmacy you sent me to filled the antibiotics. Your doctor even "chewed" me out for not coming in two weeks previously. I'm starting to feel good again. God bless you.

Western Wildlife

As Easterners moved West, pioneers found animals as exotic as the landscape... buffalo, prairie dogs, bears, beaver, bighorn sheep, cougars, wolves and rattlesnakes.

The eagle became a national symbol.

I wanted to thank everyone involved with this program. We had no one else to turn to and we were in desperate need of doctors and medications. Your program has helped us through a very difficult time.



*Arkansas Health Care Access
 Foundation*

P.O. Box 56248

Little Rock AR

72215-6248

I would like to say thank you first of all. Your program made it possible for me to have a mammogram when I had no where else to turn. I did not realize there was such a program. ...it is a much needed program. Thanks again.

**For more
 information
 on how
 you can help,
 call AHCAF at
 (501) 221-3033
 or (800) 950-8233**



**Arkansas Health Care
 Access Foundation, Inc.**

Due to your generous assistance, I was able to see an eye doctor and no longer fear the loss of my vision. Thank you all for being there.

When I needed medical attention, I was blessed with the knowledge of your program. There were kind and helpful people to guide me.

THANK YOU FOR MAKING THE DIFFERENCE!

Business Reports

AMS Benefits

Michael Moody, M.D., Chairman of the Board

AMS Benefits, Inc. is a for-profit, wholly owned subsidiary of the AMS. One of the duties of the AMS president is to chair the Board of Directors of AMS Benefits. By issuing an annual report to the AMS House of Delegates, the Board hopes to keep the AMS membership apprised of our activities and to remind them of the services available through this organization.

The primary mission of AMS Benefits is to administer and promote AMS sponsored insurance programs. The company is licensed through the Arkansas Insurance Department and has a full-time licensed agent, Alanna Scheffer. Revenues for the company are derived from administering the AMS Health Benefit Plan, a group health insurance program underwritten by American Investors Life Insurance Company located in Little Rock. Revenues for 1998 were nearly \$140,000, which represents a 27% increase over the previous year. Net income on a cash basis exceeded \$13,000.

The health plan continues to grow. In our report to the House of Delegates last year, we reported growth of 27% in the number of clinics covered. This year, 20 new clinics have been added for a net growth of 20%. More importantly, these 20 new clinics represented an increase in covered employees of over 47%. We currently have 82 clinics insured representing over 1,800 lives (employees and dependents). The total annual premium paid during 1998 exceeded \$2.3 million.

There were three events during 1998 that I wish to call to your attention. At the beginning of the year, AMS Benefits began working with Charlie Horner of the Hoffman-Henry Agency to help market the health plan. Mr. Horner has established relationships with clinics across the state and has been a tremendous asset. Increased business has led to our hiring an additional staff person, Karen Zimmerman, on a part-time basis. In September, American Investors began using the CorVel network for their managed care products. Previously, our network contract was through the AMCO organization originally founded by AMS. However, CorVel continues to maintain a network agreement with AMCO, which for all practical purposes means that we will continue using AMCO.

After the 1999 AMS Annual Session your new president, Lloyd Langston, M.D., of Pine Bluff will assume the position of Chairman. I wish to thank the other members of our Board and the AMS Benefits Staff for their support and hard work. Other Board members are Drs. Charles Logan, Lloyd Langston, Dwight Williams, Mr. Ken LaMastus, David Wroten, and Lynn Zeno.

Annual Session Committee

William D. Dedman, M.D., Chairman

The 1998 Arkansas Medical Society annual meeting was held April 2-4 in Little Rock. Percy Wooten, M.D., President of the American Medical Association, gave the keynote address at the opening House of Delegates meeting on Thursday. Dr. Wooten discussed "Protecting Our Patients and Our Profession." Candy Keller, M.D., Board Member of the American Medical Association Political Action Committee presented Scott Ferguson, M.D., with a plaque for first place in "Greatest Percentage Increase in Membership in AMPAC."

Educational programs included "Issues in Death and Dying: A Dramatic Trilogy", "Avoiding the Pitfalls of Fraud and Abuse", "Redefining the Future of Health Care: When Low Cost is No Longer Enough", and "Medical Practice - 1998 and Beyond".

The Shuffield Luncheon topic was "A Washington Insiders Perspective on National Politics" by Carlyle Gregory, Jr. Amy L. Rossi, LCSW, Executive Director of Arkansas Advocates for Children and Families, was presented the 1998 Shuffield Award. Ms. Rossi received the award for her long and distinguished history of service to the community, particularly regarding children and family issues.

Michael N. Moody, M.D., of Salem, was inducted as the 1998/1999 President at the Inaugural Banquet on Saturday evening. Dr. Moody's inaugural address was "The Challenge of Change." Officers and councilors were elected at the Final House of Delegates on Saturday morning.

The House of Delegates voted to add student representation to AMS committees and encourage boards of affiliated foundations and subsidiaries to also include students. The House of Delegates also voted to establish a mentoring program in cooperation with the Medical Student Section.

The 122nd Annual Session concluded on Saturday, April 4, with Charles Logan, M.D., 1997/1998 President, addressing the House and summarizing the past year's accomplishments.

Arkansas Department of Health George Harper, Interim Director 1998 Highlights

There are dramatic changes happening to the face of health care in Arkansas. As the 21st century approaches, we are seeing a health care system that is dramatically different in the way it is financed, organized and delivered. Government and market driven health care reforms aimed at reducing costs, improving quality and ensuring greater access to care for all segments of the population have already occurred. We in public health will likely continue to see changes in increased accountability, partnering with communities to improve their health and a strengthening of core public health functions. In response to the many changes on the horizon, the department is on the move and rising to meet the challenges of the new millennium. This report showcases that effort.

Personal Health Services

- Initiated a home monitoring program for children in families whose cases were closed from the Transitional Employment Assistance (TEA) program by the Department of Human Services (DHS). Progress reports on home monitoring efforts are provided to DHS on a regular basis.
- Investigated an outbreak of mumps in adults in a Howard County factory. Twelve cases were identified, three of which were family members of the workers. Nurses administered 659 doses of measles, mumps and rubella (MMR) vaccine.
- Hosted immunization-related satellite conferences around the state for health professionals that included topics such as vaccine safety and risk communications; epidemiology, surveillance and prevention of vaccine-preventable diseases; immunization updates; and vaccinating adults.
- Designed a curriculum and provided bereavement training for participants involved in Infant Mortality Review.
- Implemented the Medicaid Family Planning Service Demonstration Waiver, which has served over 32,000 individuals whose family incomes are less than 133% of the federal poverty level. In addition, conducted one-on-one orientation for private medical providers to implement program requirements. An educational pamphlet entitled "Your Guide to Family Planning" was developed and translated for Span-

ish-speaking clients.

- Issued a Request for Proposal to pharmacies to provide HIV medications at Public Health Service (PHS) pricing to Ryan White Title II eligible clients. It is estimated that using PHS pricing will reduce the current expenditures for HIV medications by approximately 30%.
- Provided 3,491 mammograms and 2,590 Pap smears to the women of Arkansas through the CDC funded Breast and Cervical Cancer Control Program. Thirty women were diagnosed with breast cancer, and two women were diagnosed with cervical cancer. All women received treatment.
- Developed a series of nutrition education classes, "Kids Club," for Head Start program children.
- Celebrated Arkansas' 5-A-Day for Better Health Coalition top national ranking of states with percentages of adults eating five or more servings of fruits and vegetables daily. A Hispanic 5-A-Day project was initiated in Northwest Arkansas.

Technical/Support Services

- Developed the *Sound Beginnings!* newsletter for the Department's Infant Hearing Program. The newsletter is targeted to pediatricians and early intervention providers to increase awareness of the need for universal newborn hearing screening.
- Created a poster exhibit on the early identification of hearing loss. The poster was displayed at the Baptist Memorial Maternity Health Fair, the Arkansas Chapter of the American Academy of Pediatrics Conference, the Fifteenth Annual Conference on Perinatal Care, and the Annual Convention of the Arkansas Speech-Language-Hearing Association.
- Revised the rules and regulations for Scoliosis Screening to reflect the latest American Academy of Pediatrics' medical research recommendations.
- Revised the software program for breath testing instruments to reduce the number of errors in operator entry of incident information and to make the instruments Year 2000 compatible.
- Published the first Diabetes Control Program (DCP) Annual Report, defining the burden of diabetes in Arkansas and describing the activities of the program. Over 800 copies have been distributed to health care professionals and community leaders.

Environmental Health Services

- Developed and installed a "Drinking Water for Arkansans" web site on the Agency's Web Server. The web site includes information on water system names and addresses, state and federal rules and regulations, source water protection program activities, operator certification requirements, operator training opportunities and more.

- Implemented the Comprehensive Performance Evaluation (CPE) program to assist water systems. The CPE program improves the operation and managerial aspects of the systems. It includes a thorough evaluation of the physical plant, its operating procedures and its financial and management procedures to determine if impediments exist to the production of adequate quantities of high quality water.
- Conducted training seminars for field sanitarians concerning on-site waste water treatment products. Additional training by a Registered Soil Classifier was initiated to familiarize sanitarians with various soils.
- Implemented a change in the bacteriological testing procedure for swim beaches in the state. Changed rules to comply with federal Environmental Protection Agency regulations requiring an E.coli analysis be performed on water samples collected from swim beaches.
- Participated in a Federal Emergency Management Agency (FEMA) evaluation exercise of the Chemical Stockpile Emergency Preparedness Program (CSEPP). The exercise was designed to assess the ability of local, state and federal agencies to respond to the release of a chemical agent from the Pine Bluff Arsenal.
- Conducted training for the North Little Rock, Fort Smith and Texarkana Fire Departments concerning radiation exposure control methods, use of radiation monitoring equipment and the shipping and handling of radioactive material.
- Participated in a federally evaluated Radiological Emergency Preparedness Exercise to assess state and local responders' ability to react to a radiological emergency at Arkansas Nuclear One.

Grants and Funding

- Funded at the level of \$460,000 from the U.S. Food and Drug Administration (FDA) to conduct inspections of tobacco retail outlets throughout the state. This funding enabled the Tobacco Control program to offer tobacco-related training and provide support for staff to conduct the inspections.
- Received a three-year \$878,227 contract from the federal Center for Substance Abuse Prevention for a needs assessment project that will provide a more comprehensive picture of the risk factors in various communities throughout the state and focus prevention programs on reducing youth substance abuse and other destructive behaviors.
- Received a three-year \$384,792 contract from the federal Center for Substance Abuse Treatment for a substance abuse treatment outcome measurement project to develop consistent measures to

track and report the treatment outcomes of individuals discharged from substance abuse treatment facilities. Arkansas is working in conjunction with three other states.

- Awarded 16 community based abstinence education grants and 15 county coalition grants to stimulate community efforts to reduce the number of unwed teenage pregnancies.
- Received an \$822,000 increase in Ryan White Title II HIV funding. Funds will be used to provide HIV clients with Protease Inhibitors and to conduct laboratory testing.
- Received \$506,000 from the Housing and Urban Development's Housing Opportunities for People with AIDS program to provide financial assistance for housing and supportive services to HIV- infected clients.
- Received \$126,574 from the Health Resources and Services Administration to establish regional infant death review teams.
- Implemented a MCH Epidemiology program to analyze data on perinatal health issues such as low birth weight and adequacy of prenatal care with over \$100,000 in funding from CDC.
- Received a Robert Wood Johnson Foundation All Kids Count Grant in the amount of \$499,726 to complete the development and implementation of Arkansas' statewide electronic immunization registry.
- Received \$140,000 from the United States Department of Agriculture Food and Nutrition Service to operate a WIC Farmer's Market Nutrition Program in eight Arkansas counties. As of October 1998, 14,032 coupon booklets had been issued to WIC participants to purchase fresh fruits and vegetables.
- Received a budget increase of over \$208,000 to expand the Tobacco Control Prevention's IMPACT program to prevent and control tobacco use. Fourteen communities, schools and/or coalitions have been identified for mini-grant partnerships.
- Received \$3,390,876 from the State Revolving Loan Fund for water to do source water assessment, wellhead protection, public water system supervision and small system technical assistance.
- Entered into a Joint Funding Agreement with the United States Geological Service to develop the data and maps needed to fulfill the Environmental Protection Agency's requirements for assessment of potential contaminants in the watersheds of all public water system sources.
- Approved funding through the State Health Building and Local Grant Trust Fund for three local health units in Arkansas County, Stuttgart; Union County, El Dorado; and Independence County, Batesville.

- Received funding from the Community Development Block Grant Program of the Arkansas Economic Development Program for construction of a health unit in Union County.

Collaboration/Partnerships

- Participated in a United States Agency for International Development (USAID) funded joint project with the University of Arkansas for Medical Sciences, the Little Rock VA Medical Center, and the Volgograd Medical Academy, Volgograd, Russia, to train two Russian doctors in the diagnosis, treatment, laboratory techniques and surveillance for tuberculosis control.
- Developed the Hometown Health Improvement Project to help communities address their unique health needs. The project offers community members, public and private organizations and businesses an opportunity to identify and address issues in a collaborative manner. The process assists communities to identify health problems and implement strategies that are locally designed and sustained.
- Developed with the University of Alabama at Birmingham, School of Public Health, the Arkansas Academy for Public Health Leadership. Forty participants were selected for courses designed to facilitate the application of core public health functions, effect individual growth, improve organizational effectiveness and efficiency and apply leadership skills and techniques in public health practice.
- Collaborated with thirteen health care associations and organizations to host the first annual Rural Health Forum, which provided information on national trends and the status of rural health care issues across the nation. The National Rural Health Association provided a \$10,000 grant for the conference.
- Worked with Heifer Project International to design a study to measure the nutritional status/program impact at a HPI site in India. The preliminary results were presented at the HPI symposium "Human Nutrition and Livestock in the Developing World".
- Collaborated with the Council of State and Territorial Epidemiologists, CDC Chronic Disease Center and the National Center for Health Statistics to develop a National Public Health Surveillance System (NPHSS) which includes the chronic diseases, conditions, and risk factors/determinants that should be placed under nationwide surveillance.
- Celebrated the partnership of the Arkansas Department of Health (ADH) and Arkansas Children's Hospital (ACH) as co-leaders of the Arkansas SAFE KIDS Coalition. The Division of Child and Adolescent Health, ADH, and the Community Outreach

Department, ACH, are responsible for leading the 50-member coalition toward protecting the children of Arkansas from unintentional injury.

- Partnered with the Attorney General's office to provide inservice to teachers and counselors at Westside Elementary School in Jonesboro and the Fort Smith School District, Cushman High School and Cord-Charlotte School, on violence prevention, recognizing early warning signs, and risk and protective factors.
- Coordinated the first two of four satellite downlinks on Violence Prevention presented by the Harvard School of Public Health. A broad spectrum of community leaders was encouraged to work on community efforts to respond to this issue.
- Collaborated with the Spinal Cord Commission and the Centers for Disease Control and Prevention to develop a home-based program for pressure sore prevention for individuals with spinal cord injuries. In-Home Services is responsible for the teaching and assessment aspects of the program.
- Co-sponsored a Fire Prevention Forum with the Arkansas State Fire Marshal's office featuring fire prevention programs for children and seniors.
- Implemented a research study in conjunction with the Jefferson County Mutual Aids Association to determine the most effective technique of smoke alarm maintenance education. The study involves firefighters canvassing door-to-door to compare direct installation versus voucher distribution.
- Co-sponsored a Comprehensive School Health Program (CSHP) Informational Training Session for 22 state superintendents in collaboration with the Departments of Education and Human Services. CSHP is a K-12 program which consists of eight components: healthful school environment, health services and health education, physical education, counseling, psychological and social services, nutrition services, parent/community involvement and health promotion for staff.
- Enhanced the Arkansas Fire Prevention Commission's efforts by providing smoke alarms to three local fire departments not previously participating in the Fire Burn Prevention Program.
- Participated in two communication fairs sponsored by self-help for the Hard of Hearing and the Arkansas Association of Retired Persons.
- Developed, in conjunction with the HIV Services Planning Council, a coordinated statewide HIV Services Plan. The Plan recommends standardization of HIV service delivery, access to HIV services through the development of smaller consortia districts, and statewide utilization of the Public Health Service Drug Discount Pricing Program.
- Developed a diabetes flow sheet in partnership with Blue Cross/Blue Shield, QualChoice, and

Healthsource Arkansas. The diabetes flow sheet and the accompanying patient wallet card incorporate current diabetes practice guidelines and encourage self-management and control by the patient and diabetes care team.

- Coordinated TEENS AGAINST TOBACCO USE (TATU) educational training in several communities with the American Cancer Society and the national American Lung Association.
- Assisted the American Heart Association during Healthy Heart Month to educate and motivate Arkansas youth, families and communities in the development of healthy, tobacco-free youth.
- Worked with the Arkansas Game and Fish Commission, the Arkansas Department of Pollution Control and Ecology and the Arkansas State Police in determining the pollution from septic systems in the Lake Conway area. Faulkner County sanitarians, using infrared technology, determined areas of possible contamination.
- Participated in the Operation Food Safety Coalition to develop a food safety education curriculum for public schools in Arkansas. Grades pre-K through four curricula are complete. The Coalition consists of members from the Arkansas Education Department, the University of Arkansas, the Arkansas Poultry Federation and state retail food groups.
- Collaborated with the Carroll County Breastfeeding Coalition (CCBFC), composed of the Carroll County Health Unit, Carroll Regional Medical Center (CRMC), the Cradle, LaLeche League, Head Start and interested breastfeeding citizens, to develop a resource pamphlet, "People, Places, and Pumps," for potential breastfeeding moms. Conducted medical in-service, "Breastfeeding Promotion: Avoiding the Potholes," and actively pursued businesses for a mother/baby friendly business promotion.

Selected Statistical Indicators

Personal Health Services FY98

Maternal and Child Health

Child Health Patients	31,481
EPSTD Screening	25,912
Family Planning Patients	81,212
Maternity Patients	16,210
WIC Clients	149,089

Communicable Disease Control

AIDS Testing and Counseling	79,538
TB Skin Tests	82,935
Immunizations	
HIB	109,285
Polio	69,491
DPT	36,418
MMR	95,255
Hep B	161,142

Breast and Cervical Cancer Control

Screening Mammograms	3,491
Screening Pap Smears	2,590

In-Home Services

Patient Admissions	22,694
Recovering Patient Visits	442,539
Chronic Patient Visits	100,340
Frail Patient Hours	1,590,775
Hospice Patient Days	38,730
Case Management Units	146,532

Substance Abuse Treatment

Adults Served	13,962
Adolescents Served	810
Regional Alcohol and Drug Detoxification (RADD) Patients	2,266

Services to Protect the Environment And Health of the General Public

Environmental Complaint Investigations	3,879
Food Service Establishment Inspections	21,383
Laboratory Sample Analyses	438,834
Milk and Dairy Farm Inspections	5,950
Protective Health Codes Licenses Issued	13,056
Public Swimming Pool Inspections	4,431
Radiological Equipment Inspections	619
Septic Tank Permits Issued	9,309
Water and Wastewater Plans Reviewed	3,205

Arkansas Health Care Access Foundation, Inc. Leif Lorenz, DDS, President

For the past seven years I have had the privilege of serving on the Board of Directors of the Arkansas Health Care Access Foundation (AHCAF) with some of the most concerned physicians and medical professionals in the state. This year, it is my honor to be entrusted to serve as President of AHCAF. I have witnessed wonderful progress in the program and I am pleased to provide this update.

AHCAF began nine years ago in hopes of making a difference in the lives of the medically needy. We wanted to help meet the medical needs of the approximately 200,000 uninsured low income Arkansans. The program has continued to expand its service to eligible Arkansans and I'm proud to say, is now able to meet a variety of these needs.

As a dentist, I would like to initially address the progress made in offering dental care through the program. I am particularly proud that fellow dentists realize the important role they play in the care of the sick individual. In 1991, AHCAF approached the Arkansas State Dental Association with a request to help recruit dentists as volunteer professionals. As a result, 140 dentists and oral surgeons were brought on board to donate limited dental care to qualified AHCAF

participants. More recently, in 1997, the board worked with the National Foundation of Dentistry for the Handicapped and the Arkansas State Dental Association to start the Donated Dental Services (DDS) program. This program is the first of its kind in the state and provides one time comprehensive dental treatment to disabled, elderly or medically compromised Arkansans. I am glad to report that 84 Arkansas dentists and oral surgeons and 11 dental laboratories are participating in DDS. It has become immensely popular and since inception has received over 500 qualified applications! Referrals began in October 1997, and within 15 months treatment was completed on 65 patients, totaling \$99,000.00, with more currently in progress.

AHCAF continues to offer needy Arkansans several avenues for medical care. Currently through the program, medical services are made available to almost 4,000 active applicants at a program cost of approximately \$20.00 per person, per year. AHCAF has served almost 55,000 Arkansans since its beginning. Using over 1,000 medical doctors, the primary service provided continues to be referrals to physician's offices. Ancillary services offered include free prescriptions courtesy of pharmaceutical manufacturers Pfizer, Johnson & Johnson and SmithKline Beecham, as well as discounted drugs, all filled at over 350 participating pharmacies; hospitalization and out patient services at over 90 hospitals; home health related services; and access to podiatrists. Within the past 12 months, the Foundation processed over 11,000 telephone calls and documented 1,374 referrals. Many more visits and services were provided but went undocumented because AHCAF does not require providers to provide any extra paperwork or reporting. A survey in the December issue of *The Journal of the Arkansas Medical Society* reported that over 50% of physician volunteers saw patients for more than one visit. Many pharmacists and dentists as well, see patients for repeat visits which go undocumented for the same reasons.

Helping make all of these services possible are the professional associations and societies representing and advising each of the medical professions involved with the program. We offer our gratitude to the Arkansas Medical Society for their support and assistance, the Arkansas Hospital Association for encouraging the hospitals' unflinching participation, the Arkansas Pharmacists' Association for their continuing cooperation, the Home Care Association of Arkansas for being available in times of need, the Arkansas Podiatric Medical Association for recognizing the special need for their service, and the Arkansas State Dental Association for supporting Arkansas dentists in taking a great leap of faith.

We offer our profound thanks to the Arkansas

Department of Human Services (DHS) for their financial support of the program and the local DHS county offices for their support in screening the majority of participants. AHCAF could not function without their invaluable assistance. Frequently, they are the only way residents learn about the care available. Fifty five thousand Arkansans have enrolled in the program since its beginning, yet there are many thousands more who do not know about the service, are misinformed about the program and don't know where to turn for help. We remain reliant on all local county DHS offices to properly inform and assist their county residents about applying for AHCAF services and assistance.

The Foundation continues its long standing cooperation with the Arkansas Department of Health by providing treatment resources for patients participating in the Breast and Cervical Cancer Control Program and those needing follow up for suspicious Pap smears. The Department of Health helps serve as a point of entry into the AHCAF program by screening applicants who are enrolled in their Department of Health programs.

Reaching people with the "message" is a never ending challenge. The Foundation plans to develop a publicity campaign within the next several months, which will inform more Arkansans. Within the year, we will be publishing our first newsletter and sending to all AHCAF volunteers, thanks to a donation of \$1,000.00 by SmithKline Beecham Pharmaceuticals. Pfizer Pharmaceuticals has kindly donated the printing of our program applications this past year. With several smaller donations, we established the Tom Tapp Fund in honor of Mr. Tapp who died last year of cancer. He was a long time Little Rock pharmacist and a dedicated board member. The fund is being used to purchase necessary medicines when not affordable by certain patients. We will also be exploring the possibility of more services such as additional lab and pharmaceuticals.

We are grateful to all of you who donate skills, time and energy through the Arkansas Health Care Access Foundation. Thank you for your untiring service.

If you wish to know more about how you may help, call me at 501-227-6200 or Pat Keller, Program Director, at 501-221-3033 or 1-800-950-8233.

Arkansas Medical Society 1999 Budget

Gerald Stoltz, M.D., Chairman

INCOME

Dues	720,000.00
Journal Advertising	77,000.00
Booth	35,000.00
Annual Session	35,000.00
AMA Reimbursement	14,000.00
Directory & Miscellaneous	12,000.00
Interest Income	70,000.00
Specialty Desk	1,957.00
Continuing Medical Education	6,000.00
Allocation of G.A. Department	5,000.00
Educational Programs	50,000.00
TOTAL	1,025,957.00

EXPENSE

Salaries	316,234.00
Travel & Convention	35,000.00
AMA Delegation	27,000.00
President's Account	5,000.00
Taxes	27,200.00
Retirement	36,000.00
Stationery & Printing	20,000.00
Office Supplies & Expenses	32,000.00
Telephone	10,000.00
Rent	54,672.00
Postage & Communications	30,000.00
Insurance & Bonds	47,000.00
Auditing	5,250.00
Council & Executive Committee	4,000.00
Journal & Directory Expense	73,000.00
Dues & Subscriptions	8,200.00
Gifts & Contributions	2,500.00
Alliance	8,700.00
Legal Services (retainer)	27,426.00
Committee / District Meeting	5,000.00
Public Relations	3,000.00
Miscellaneous Expenses	5,000.00
Office Equipment & Furniture	7,000.00
Continuing Medical Education	4,500.00
Contract Labor	5,000.00
AMS Resident & Student Section	6,000.00
Annual Session	78,000.00
Educational Programs	29,000.00
Physicians Health Committee	10,000.00
MEFFA - Dues	12,150.00
*Richmond Early Retirement	1,940.00
Internet setup/fees	2,000.00
TOTAL	937,772.00

Governmental Affairs

INCOME

Dues	241,300.00
Income - Misc, Projects	2,000.00
TOTAL	243,300.00

EXPENSE

Salaries	128,429.00
Retirement	15,000.00
Taxes	9,500.00
Stationery & Printing	6,000.00
Office Sup, Telephone, Misc	8,000.00
Equipment & Furniture	1,500.00
Auto, Travel & Meeting	50,000.00
Legal Retainer	18,300.00
Postage & Communications	20,000.00
Insurance & Bonds	7,500.00
Office Allocation to AMS	5,000.00
Audit GA	1,500.00
TOTAL	270,729.00

Arkansas Medical Society Medical Student Section

Karen L. McNiece, President

It is my privilege to update you on the activities of the UAMS Medical Student Section of the Arkansas Medical Society and American Medical Association. It has been an exciting year of growth and change for our chapter, and your support and encouragement have been crucial in making this such a successful year for our chapter.

We continue to grow in the number of members we have in both the AMA and AMS. For a chapter that graduates about a quarter of its membership each year, this is no small accomplishment. We again this year expect to receive a check for more than \$2000 for our recruitment efforts with the AMA. This money will be used to help assist members of our delegations with the cost of travel to National meetings, to improve chapter development, and to further recruitment efforts.

One of the goals of the Medical Student Section is to introduce students to what the AMS has to offer them and also to educate them as to how they as students, and in the future as physicians, can play an active role in these activities. Throughout 1998, we have tried to strengthen our efforts toward achieving this goal. In May, more than 50 students attended the AMS annual convention including a reception especially for students. The MSS also presented four resolutions before the House of Delegates at this convention. Thanks to your enthusiastic support, we are cur-

rently making nominations or recommendations for a student member to each of the AMS committees and foundations, and for the first time ever a medical student will serve as a voting member of the AMS Council. All of these opportunities have provided wonderful learning experiences for our members.

In May, the House of Delegates also asked the AMS Council to establish a Mentoring program which will serve our members. The first AMS committee ever co-chaired by a student and a physician member is currently working to set up this program which will pair student and physician members around the state. We are hoping to begin with the Class of 2003 this fall. You should be hearing more about how you can become involved throughout the spring. I hope you will all seriously consider serving as a medical student's mentor.

We were fortunate again this year to have had the opportunity to send delegations to both the annual and interim meetings of the AMA. In June, Rick Cole, vice-president of the AMA/AMS-MSS; Becky Latch, Secretary/Treasurer of the AMA/AMS-MSS; and I, Karen McNiece, President of the AMA/AMS-MSS, represented our chapter in Chicago. Kelli Schmitz, a former Secretary/Treasurer of our chapter, had the honor of serving on the Credentials Committee at this meeting. She would not have been able to serve in this capacity and bring some national leadership experience back to our chapter if the AMS had not agreed to help fund her trip. In December, Rick Cole, Becky Latch, and Kelli Schmitz again had the opportunity to serve as the Arkansas delegation at the AMA-MSS interim meeting. In addition to being able to participate in the policy-making procedures of the AMA-MSS, we were also able to hear new ideas for chapter programs, activities, and development by talking to students from chapters across the country.

We continue to have our bimonthly lunch meetings. Some of the speakers we have been privileged to host over the last year include Pat Keller, Program Director for Arkansas Health Care Access Foundation, Inc.; Charles R. Homer of Hoffman-Henry Insurance corporation who works with AMS Benefits; and Michael Manley, RN, Executive Director of Arkansas Regional Organ Recovery Agency. We greatly appreciate the AMS for continuing to fund the lunches provided for the 75-100 members present at these meetings. They would not be a success without this support.

This fall we also began a used book sale program through which students can sell their old textbooks to other students. In exchange for actually selling the books, students agree to provide a certain percent of their profits to our chapter. The program has been a big success, delivering a much-needed service to UAMS students as well as providing our chapter with

extra funds to support a number of our activities.

As you can see, 1998 has been a very exciting year for the Medical Student Section of the AMS and next year promises to be just as eventful. If you are interested in knowing more about our chapter or would like to hear further details about our ongoing projects, please feel free to contact me at klmcniecalife.uams.edu or call me at (501) 661-0691. We are always looking for speakers for our lunch meetings and would love to hear from you if you have something to share. Thanks again for the enthusiastic support that you continue to provide to the Medical Student Section of the AMS.

Arkansas State Medical Board Peggy Pryor Cryer, Executive Secretary

1998 Licensing Statistics

Medical Doctors/ Doctors of Osteopathy in 1998	447
Medical Doctors/ Doctors of Osteopathy (total)	7,965
Medical Doctors/Doctors of Osteopathy (in state)	4,987
Occupational Therapists Licensed	167
Occupational Therapists	817
Occupational Therapist Assistants Licensed	33
Occupational Therapist Assistants	144
Physician Trained Assistants	9
Respiratory Care Therapists Licensed	185
Respiratory Care Therapists	1,231

Summary of Board Proceedings for 1998

Individual Complaints and Discussions (total)	266
Complaints (including investigations)	185
Discussions	81
Suspended Licenses	6
Licenses Placed on Probation	24
Licenses Revoked	3
Licenses Surrendered	1
Physicians requested to appear for further discussion (from cases)	20
Physicians requested to appear for further discussion (from discussions)	2

Complaints (not including investigations)

Advertising	0
Alcohol/Drugs	0
Billing Discrepancies	11
Communication or Dr./Patient Conflict	18
Data Bank Report	0
Emergency Room Treatment	6
Ethics	2
Front Office Personnel	0
Failure to Release Medical Records	9
Miscellaneous	33
Negligence	0
Practicing/Allowing to Practice without a License	0
Over Charging	2

Over Testing	0
Actions Taken by Other States	0
Lack of Physician Response	13
Quality of Care Issue	49
Record Keeping	1
Self Prescribing	0
Sexual Harassment	3

1998 Board Actions

Probation	16
Suspension	14
Suspension (stayed)	3
Revocation	3
Revocation (stayed)	9
Surrendered	1

1998 End of the Year Report Complaints

Type of Complaint	Received	Pending	No Violation	Withdrawn	Must Appear	Information Only
Advertising						
Alcohol/Drugs						
Billing Discrepancies	11	1	9	1		
Communication or Dr./Pt. Conflicts	18	4	14			
Data Bank Report						
Emergency Room Treatment	6	1	5			
Ethics	2		2			
Front Office Personnel						
Failure to Release Medical Records	9	2	7			
Miscellaneous	33	2	28	2		1
Negligence						
Practicing/Allowing to Practice w/o a license						
Over Charging	2	1	1			
Over Prescribing	3	1	2			
Over Testing						
Actions Taken by Other States						
Lack of Physician Response	13	1	12			
Quality of Care Issue	49	12	35			2
Record Keeping	1		1			
Self Prescribing						
Sexual Harassment	3		3			
Total	150	25	119	3	0	3

Regulations Passed by the Board and/or Amended

REGULATION 2(6)

The treatment of pain with dangerous drugs and controlled substances is a legitimate medical purpose when done in the usual course of medical practice. If the provisions as set out below in this Resolution are met, and if all drug treatment is properly documented, the Board will consider such practices as prescribing in a therapeutic manner, and prescribing and practicing medicine in a manner consistent with public health and welfare.

However, a physician who prescribes *narcotic agents Schedule 2, 3, 4, and 5, excluding Schedule 4 Propoxyphene products and to include the schedule drugs Talwin, Stadol, and Nubain, on a long term basis (more than six (6) months) for a patient with pain not associated with malignant or terminal illness will be considered exhibiting gross negligence or ignorant malpractice unless he or she has complied with the following:

- The physician will keep accurate records to include the medical history, physical examination, other evaluations and consultations, treatment plan objective, informed consent noted in the patient record, treatment, medications given, agreements with the patient and periodic reviews.
- The physician will periodically review the course of schedule drug treatment of the patient and any new information about etiology of the pain. If the patient has not improved, the physician should assess the appropriateness of continued prescribing of scheduled medications or dangerous drugs, or trial of other modalities.
- The physician will obtain written informed consent from those patients he or she is concerned may abuse controlled substances and discuss the risks and benefits of the use of controlled substances with the patient, his or her guardian, or authorized representatives.
- The physician will be licensed appropriately in Arkansas and have a valid controlled substance registration and comply with the Federal and State regulations for the issuing of controlled substances and prescriptions, more especially the regulations as set forth in 21 Code of Federal Regulations Section 1300, et sequence.

* As defined in 21 Code of Federal Regulation

Suggested Informed Consent Form

I give my consent to receive scheduled medication and acknowledge this _____ day of _____ 1998 that Dr. _____ has explained the risks and benefits of the following medications.

1. _____
2. _____
3. _____

Signature

Date

ADOPTED BY EMERGENCY ORDER ON SEPTEMBER 18, 1998
Approved by the Board following Public Hearing on December 3, 1998.

REGULATION NO. 21 ANOREXICANT DRUG GUIDELINES

Short term treatment of obesity with Schedule III and IV drugs.

A physician will be considered as exhibiting gross negligence or ignorant malpractice if he prescribes Schedule III and IV scheduled drugs under the Uniform Controlled Substance Act for obesity, except in conformity with the requirements as set below:

1. Anorexiant drugs listed on Schedule III and IV under the Uniform Controlled Substances Act shall not be dispensed or prescribed for the treatment of obesity, except in conformity with the following minimal requirements. Schedule II drugs may not be used in the treatment of obesity (see Regulation 7 of the Arkansas State Medical Board.)
2. The physician should be knowledgeable in the pathophysiology and treatment of obesity. An established physician/patient relationship should exist. The patient should be age 18 or older, or have written consent from parent or guardian. The medication should only be an adjunct to a comprehensive weight loss program focused on appropriate nutrition education, a change in lifestyle, counseling, and an individualized exercise program. The physician should determine whether or not the patient has made a substantial good faith effort to lose weight through diet and alteration of lifestyle prior to beginning drug therapy. The treating physician shall take a complete history of the patient and shall give a complete physical examination. The physical examination shall include checking the blood pressure and pulse, examining the heart and lungs, recording weight and height, and administering any

other appropriate diagnostic tests. The history and examination shall be sufficient to determine if the patient has previously been drug dependent, to determine if there is a metabolic cause of the obesity which would make anorexiant drugs inappropriate (e.g. hypothyroidism) and to determine if other contraindications to use of the drugs exist. The treating physician shall enter each of those findings in the patient's records.

3. The physician should discuss with the patient different approaches to the treatment of obesity, and the risks and benefits associated with each approach. Risks should include potential side effects (e.g. cardiovascular and pulmonary complications, as outlined in the PDR), as well as the potential for lack of success with weight loss. The physician should be aware of potential drug interactions between anorexiant, and other centrally acting drugs. The treating physician shall prescribe a diet for weight loss and appropriate counseling regarding lifestyle change, and record these changes on the patient record. Consideration on the use of anorexiant medications should take into account the degree of overweight, and concomitant medical conditions. The body mass index (BMI) should be used as a guide to determine the degree of overweight. The BMI is defined as the weight (kg) divided by the height (meters squared). A chart to determine BMI is enclosed. In general, anorexiant medication should only be used if the BMI is more than 27. In the case of concomitant obesity-related medical conditions, anorexiant medications may be considered with a BMI above 25. Obesity related medical conditions include diabetes, hypertension, dyslipidemia, cardiovascular disease, sleep apnea, psychological conditions, disc disease and severe arthritis of the lower extremities.
4. The treating physician shall prescribe a daily dosage that does not exceed the dosage recommended in the manufacturer's prescribing information for the drug prescribed or dispensed.
5. The treating physician shall not dispense or prescribe more than a 30-day supply for a patient on the first visit. Thereafter, not more than a 30-day supply shall be dispensed or prescribed at the time of each visit. The patient shall be weighed at each visit prior to dispensing or prescribing an additional supply of the drug and the weight shall be entered in the patient's record.
6. At the time of each return patient visit, the treating physician shall monitor progress of the patient. The patient's weight, blood pressure, pulse, heart and lungs shall be checked. The findings shall be entered in the patient's record. In addition,

tion to any side effects of the medications, the physician should perform appropriate exams and tests to monitor the safety of any weight loss. This may include a more detailed dietary questionnaire, serum electrolytes, blood glucose, and other tests deemed appropriate. The physician should discontinue the anorexiant medications when the patient reaches his/her weight loss goals. These goals may be defined as a body weight that is no longer "obese" (e.g. BMI of less than or equal to 27), or an improvement in medical conditions (e.g. normalization of blood glucose.) The Rule and Regulation for patients who are no longer obese for such period of time as to allow the patient to adapt to a lifestyle change for no more than an additional sixty (60) days.

7. Except as otherwise provided by this regulation, Schedule III or IV anorexiant drugs are only recommended for short-term use (e.g. 90 days). In addition, anorexiant drugs should not be prescribed to a patient with a BMI of less than 27. However, the treating physician may extend therapy beyond 90 days under the following conditions:
 - a. When the anorexiant drugs are indicated for treatment of diseases other than obesity; and
 - b. When, in the physician's professional judgment, the treating physician is observing and recording significant progress or benefit from the drugs and no adverse effects occur that are related to the treatment. These observations shall be documented in the patient's record.
8. Specialty clinics which market themselves to the public as centers for the treatment of obesity will be required to prescribe a comprehensive behavior modification program and dietary counseling directed by a professional during the course of treatment.

History: Adopted March 13, 1998

REGULATION 22 LASER SURGERY GUIDELINES

Pursuant to Ark. Code Ann. 17-95-202, the practice of medicine involves the use of surgery for the diagnosing and treatment of human disease, ailment, injury, deformity, or other physical conditions. Surgery is further defined by this Board as any procedure in which human tissue is cut, altered, or otherwise infiltrated by mechanical means, to include the use of lasers. The Board further finds that the use of medical lasers on human beings, for therapeutic or cosmetic lasers, constitutes the practice of medicine.

Ark. Code Ann. 17-95-409(a)(2)(g) states that the Board may revoke an existing license, or suspend the

same, if a physician has committed unprofessional conduct, further defined as committing gross negligence or ignorant malpractice. The Board finds that a physician has, in fact, committed gross negligence if he performs laser surgery on patients without benefit of: a) clinical experience in the use of lasers; b) training of clinical management of patients; c) continuing medical education courses in the use of lasers; d) providing appropriate preoperative, operative, and post operative management.

History: Adopted June 5, 1998.

Continuing Medical Education (CME) Accreditation Committee

Steven Strode, M.D., Chair

The CME Accreditation Committee is charged with the responsibility to accredit intrastate sponsors of continuing medical education (CME). The Committee accredits organizations such as hospitals, not individual CME activities. Among other benefits, accreditation bestows upon an organization the privilege of designating CME activities for AMA Category 1 credit. Only accredited CME sponsors may designate activities for AMA credit.

During 1998, the Committee met in April and again in October. The Committee reviewed five of our nine sponsors during 1998 and took the following accreditation actions:

- Washington Regional Medical Center - 1 year full accreditation
- St. Vincent Infirmary Medical Center- 2 years full accreditation
- VA Medical Center, Fayetteville - 2 years full accreditation
- Baptist Medical Center - 2 years full accreditation
- Conway Regional Medical Center - 1 year provisional accreditation

Conway Regional Medical Center is our newest accredited sponsor and as such must undergo provisional status for one year. Other sponsors are as follows: St. Joseph's and National Park in Hot Springs, North Arkansas in Harrison and Baxter County in Mountain Home.

CME accreditation is accomplished under the auspices of the Accreditation Council for Continuing Medical Education (ACCME). This national organization consisting of seven parent organizations including the American Medical Association and the American Hospital Association have established a nationwide system of accreditation for sponsors of CME. The ACCME directly accredits sponsors whose scope is national or regional. For intrastate sponsors, the ACCME has established a "recognition" system

whereby they recognize certain organizations, usually state medical societies, to conduct the accreditation functions within their state. During 1999, the AMS will undergo a Recognition Survey conducted by the ACCME's Committee for Review and Recognition. Satisfactory completion of the survey is a requirement for the AMS to maintain its "recognized" status.

Our Committee was involved in sponsoring two seminars this year for CME sponsors. We continued our co-sponsorship of the Southeast CME Symposium with the state medical associations of Alabama, Mississippi, and Louisiana. The 1998 symposium was held in Jackson Mississippi. In October, we sponsored a one and a half day workshop for Arkansas CME providers in Eureka Springs. This was the second of what we hope will continue to be an annual event.

My report would not be complete without calling to your attention the enormous amount of time and energy expended by the committee members and the AMS staff. For each of the accreditation decisions mentioned above, many hours of preparation is involved in reviewing applications, conducting the mandatory on-site survey of the sponsor, and in developing the reports and summaries of our findings. In addition, committee members and staff handle countless inquiries from sponsors and prospective sponsors, often necessitating on-site consults at locations around the state. Many thanks to these volunteers.

Medical Education Foundation for Arkansas Martin Eisele, M.D., President

The Medical Education Foundation for Arkansas was organized by the Arkansas Medical Society in 1959. Members of the board are Drs. William Bishop, James Kyser, and Gerald Stolz. Serving as ex-officio with voting powers are the Arkansas Medical Society president, president-elect, immediate past president, and the Dean of the University of Arkansas College of Medicine.

The Foundation receives funds contributed by the Arkansas Medical Society which amounts to \$5 for each full dues paying member per year. Since MEFFA is a tax exempt foundation (501(c)(3)) all contributions are tax deductible. By conservative investment and expenditures, the Foundation has grown to a net worth in excess of \$550,000. The Foundation has an independent audit each year and a copy of the audit is provided to the Council. Funds are used each year to promote the art and science of medicine and the betterment of the health of the public by providing financial support to recognize schools or institutions

who provide primary and advanced medical education. The board has established a policy of accumulating funds over a period of time so in the future the foundation will have adequate funds to undertake major projects.

During 1998, the Medical Education Foundation for Arkansas made the following contributions to the University of Arkansas College of Medicine:

- \$5,000 to the Ben Saltzman Endowed Chair in Rural Family Medicine
- \$8,000 to the UAMS Distinguished Lecture Series (10 lectures at \$800 each)
- \$14,525 to the Department of Microbiology and Immunology to develop a computer based multimedia program.
- \$1,520 to the Department of Anatomy to purchase anatomical models.

The MEFFA Board also approved establishing a 170 Plan (planned giving). The program accepts contributions from physicians that are used to purchase lifetime annuities. At retirement physicians and their beneficiary may draw from the annuity. At their death the proceeds of the life insurance (less 10%) are paid to MEFFA. A portion of the contribution is tax deductible.

Medical Student Section Mentoring Program Committee

Stacy Smith-Foley and Carl Chambers, MD, co-chairs

At the 1998 Annual Session, the AMS House of Delegates approved a student resolution calling on the AMS Council to establish a mentoring program for students and practicing physicians. A committee was established in the fall to accomplish this task.

The committee members are as follows: medical students Robert Cullen, Sarah Robertson, Stacy Smith-Foley and Ramona Rhodes; Drs. Lloyd Langston, Carl Chambers, and Gerald Stolz.

The groundwork for the mentoring program has been established and during this year's Annual Meeting we will begin recruiting physicians to serve as mentors. The qualifications and responsibilities of the mentor have been developed as well as sign-up forms. These are listed below.

Mentor Qualifications

- Mentors must be in active private practice
- Mentors must have completed 3 years of active private practice
- Must have a willingness to share their experience and time with students

Mentor Responsibilities

- The mentor must make at least one quality, face-to-face contact per year with his or her assigned student
- The mentor must agree to have some contact with the student at least once a month by phone, letter, e-mail, postcard, or other means.

From the student perspective, the program will be phased in starting with the 1999 freshman class. The design of the program is very flexible and students will have the option to change mentors if necessary. Annual surveys will be conducted to evaluate the program.

The committee believes that both student and physician will gain tremendous insight from participation in this program. It offers an exciting new opportunity for students and physicians to learn from each other with the end result being a stronger Arkansas Medical Society.

This concludes the report of the Medical Student Section Mentoring Program Committee. We would like to request the continued support of the AMS membership and encourage them to participate as a mentor in this important project.

Physicians' Health Committee and Arkansas Medical Foundation

Joe L. Martindale, M.D., Medical Director

The Physicians' Health Committee was formed to intervene, assist, and advocate for physicians with substance abuse problems. Funding for the Foundation is provided through an increase in licensure fees of all Arkansas physicians. The Arkansas Medical Foundation is a 501(c)(3) organization. All inquiries, requests for help, and assistance provided are considered confidential.

Members of the Arkansas Medical Foundation Board of Directors are Larry Lawson, M.D., Paragould, President, Joanna Seibert, M.D., Little Rock, Vice President, Ms. Karen Ballard, Little Rock, Secretary/Treasurer, Glen Baker, M.D., Little Rock, and John Lynch, D.O. Ex-officio members are Ray Jouett, M.D., Little Rock, Chairman of the Arkansas State Medical Board, and Mr. Ken LaMastus, Little Rock, Executive Vice President, Arkansas Medical Society.

When the Foundation was started 2 1/2 years ago, there were 20 physicians under contract with the Physicians' Health Committee. As of January 1, 1999, there are approximately 95 physicians and dentists being monitored. Of those currently under contract, 67% of the dentists are due to Board action (this is due to a smaller amount of dentists being monitored as opposed to physicians) while 46% of the physicians under contract are Board action. The time pe-

riod of monitoring has been increased from two years to five years. As a result of this increased monitoring time period, there have been only four relapses in the past 2 1/2 years. There have been several physicians that had successfully completed the two-year contract who have contacted the Committee and have requested and subsequently entered into an extended monitoring contract.

The Committee has made presentations at various healthcare entities to educate them about our program. This resulted in setting up monitoring programs within their organizations. The Committee has also successfully assisted physicians under contract to maintain good working relationships with numerous malpractice insurance companies, HMOs, PPOs, hospital credentialing committees, the DEA, and various licensing boards.

Arkansas Medical Foundation

23157 I-30, Suite 201

Bryant, Arkansas 72022

Telephone: 501-847-8088

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Pulaski County Medical Society Fred Reddoch, Executive Director

The past year was a good year for the Society. Highlights of the year were:

- the installation of Marvin Leibovich, MD as President
- lobbying efforts on behalf of lowering the blood/alcohol limit for drivers and passing a primary safety belt law
- awarding of scholarships to four medical students
- joint meeting with the Pulaski County Bar Association slight increases in membership and financial reserves

Report of the AMS Executive Vice President Ken LaMastus, CAE

What we are hearing from physicians is "Who cares about Y2K? I am concerned about what managed care is doing to my practice and more important what it is doing to my patients." We are continuing to hear situations where managed care prohibited treatment by more qualified physicians or failed to permit services in the best interest of the patient's health. Admittedly, these are a relatively small percentage of those covered under managed care programs. I am reminded of the quote, "Statistics don't mean anything if it is you."

Managed care can take credit for having a hand in bringing down the cost of healthcare but we should

remember the predictions in my report last year that the cost of insurance including managed care is going to increase. Indeed they have increased more than the actual cost of health care. This is due to insurance companies striving to get market share and under-pricing their products. This can usually be done in short term but there must be a day of reckoning. We have seen the cost of insurance go up in an attempt by insurance companies to regain profitability.

We are finding that many of the new legislators (due to term limits) have ran on the issue of managed care. During this session of the legislature, which started in January, legislators have demanded legislation be drafted allowing patients to choose their own physicians. In fact, as this article is being written, over 51 of the 100 House members signed onto a bill that the Arkansas Medical Society is calling "Any Qualified Provider." Many states have introduced and passed legislation that is termed anti-managed care because of patient problems.

In the last Congressional Session, legislation was introduced by both the Democrats and Republicans pertaining to managed care. The Democrat's key issue was removal of the exemption from liability, which is enjoyed by health insurance companies. Only Congress can remove this federal exemption that would allow patients the opportunity in court to prove they were wronged or injured by a managed organization in the same manner patients can sue a physician if they are injured. Efforts will be made in the 1999 session of Congress to once again remove this exemption.

Physicians will soon have a greater need to have Internet access in their offices. There is a wealth of information available on medical issues as well as treatment modalities and research. It was announced this week that there is a new Internet-based depository of clinical practice guidelines. Physicians who have Internet access will have instant access to guidelines that have largely gathered dust on researchers' desks. The primary goal of the National Guideline Clearinghouse (<http://www.guideline.gov/>) will make this information readily available to all those who have Internet access. This is made possible by the federal agency of Health Care Policy and Research, the American Medical Association, and the American Association of Health Plans.

Currently there are 286 guidelines cataloged in the clearinghouse. These guidelines have been developed by specialty societies, federal agencies, health plans, hospitals, and others. All of the guidelines that will be posted will be based upon physician input and research and it is estimated in three years there will be over 3,500 guidelines in the clearinghouse.

In 1998, the Arkansas Medical Society Building was refinanced. It was refinanced with a 7.1% fixed

interest rate. Before we had a floating interest rate with a balloon note in the year 2002.

The Medical Education Foundation for Arkansas (MEFFA) installed a 170 Plan which is a plan giving program that allow physicians to obtain some tax deduction for a contribution to MEFFA. It would also provide an annuity at a predetermined time and can be a supplement to an individual's retirement plan as well as a future funding tool for MEFFA.

In 1998 we saw, for the first time, a leveling of membership in the Arkansas Medical Society. This is a trend in many states. In fact many state organizations, as well as the American Medical Association, have seen actual declines in membership that are significant. The Arkansas Medical Society is composed of a high percentage of practicing physicians in the state and are hopeful that we will be able to maintain this position and trust.

No professional association can exist without members and dedicated volunteer leadership. The membership should be grateful for the many hours members contribute of their time to benefit medicine and the people of Arkansas.

Report of the AMS Council

Gerald Stolz, M.D., Chairman

The Council of the Arkansas Medical Society met on Thursday, April 2, 1998 and on Friday, April 3, 1998, at the Excelsior Hotel in Little Rock and the following business was received and transacted:

1. The Council approved the minutes of the following meetings: November 23, 1997 Council meeting, the January 28, 1998 Executive Committee meeting, and the February 25, 1998 Executive Committee meeting.
2. The Council approved the following dues exemption requests:

Arkansas County: John M. Hestir, Life
Baxter County: Helga E. Chock, Affiliate
Benton County: Patrick K. Keane, Affiliate; Billy J. Puckett, Life
Clark County: James L. Lowry, Affiliate
Craighead/Poinsett Counties: Larry E. Mahon, Emeritus; Gary S. Sapiro, Affiliate
Crawford County: Edward Doyle, Affiliate; A. Lawrence Travis, Life
Crittenden County: Chester W. Peeples, Jr., Life
Garland County: William R. Mashburn, Affiliate; D. Bluford Stough, III, Life
Hot Spring County: Russell W. Cobb, Life
Jefferson County: William J. James, Life
Lawrence County: Joe E. Hughes, Emeritus
Little River County: Norman W. Peacock, Jr.,

Pope County: Lynn Haines, Affiliate; John W.

King, Emeritus; Douglas H. Lowrey, Life

Pulaski County: James H. Abraham, Emeritus; John E. Allen, Jr., Affiliate; Melvin L. Belknap, Emeritus; William B. Bishop, Emeritus; Donald G. Browning, Affiliate; Charles R. Fielder, Life; Thomas M. Fletcher, Life; George M. Goza, Jr., Affiliate; Robert Hardin, Affiliate; J. Harry Hayes, Jr., Affiliate; Harold G. Hutson, Emeritus; B. Richard Johnson, Emeritus; J. Floyd Kyser, Emeritus; Ben M. Lincoln, Life; David A. Miles, Life; Raymond P. Miller, Sr., Emeritus; Bruce E. Schratz, Emeritus

Saline County: James Bethel, Life; Donald L. Viner, Emeritus

Sebastian County: Peter J. Irwin, Emeritus; William F. Turner, Emeritus

St. Francis County: Fun Hung Fong, Emeritus

Washington County: Wade W. Burnside, Jr., Emeritus; Joseph H. McAlister, Affiliate; Charles P. Sisco, Emeritus

Union County: David B. Fraser, Life

Direct Membership: Patricia A. Lang, Life; C. Wayne Starnes, Affiliate

3. Dr. Gerald Stolz discussed appointments for the Medicare Carrier Advisory Committee regarding terms and eligibility to serve more than one term. Ken LaMastus explained there are no requirements other than the Council had coordinated this committee with the Medical Services Review Committee (MSRC) which has been abolished. Dr. William Jones asked the appointment representing dermatology be postponed until after their upcoming annual specialty meeting. Discussion was held regarding receiving recommendations from specialty societies for appointments to the Medicare Carrier Advisory Committee and, upon motion, the Council voted to continue to ask specialty societies to recommend physicians to serve on the Medicare Carrier Advisory Committee. If nominations are not received within thirty days prior to the annual meeting, the Council will act on the appointments.

4. The Council made the following appointments:

Budget Committee: Joe Stallings, Jonesboro

Journal Editorial Board: reappointed Alex Finkbeiner, Little Rock, representing UAMS reappointed Jerry Byrum, Little Rock, representing pediatrics

Medical Education Foundation for Arkansas:

reappointed James Kyser, Little Rock

Committee on Position Papers:

Joseph Beck, Little Rock; reappointed David Davis, Fayetteville; Michael Young, Prescott

Arkansas Medical Foundation (the following nominations were made): reappoint Larry Lawson, Paragould to Position #1; Joanna Seibert, Little Rock to Position #2

Young Physicians Task Force: David Murphy, Russellville; Jane McKinnon, Fort Smith; Kimberly Garner, Pine Bluff

Medicare Carrier Advisory Committee: Kelsy Caplinger, Little Rock, representing allergy E. Taliaferro Warren, Hot Springs, representing cardiovascular diseases and cardiovascular surgery; Bob Cogburn, Little Rock, representing hematology and oncology; Robert Borg, Hot Springs, representing otolaryngology; Kevin Hurlbut, Fayetteville, representing physical medicine and rehabilitation; Rudy Van Hemert, Little Rock, representing radiology; Loverd Peacock, Jonesboro, representing therapeutic radiology; Zachary Mason, Little Rock, representing neurosurgery.

5. Dr. Percy Wootton, President of the American Medical Association, greeted the Council and presented an AMA Membership Award to Dr. Gerald Stolz. This is the nineteenth year the Arkansas Medical Society has surpassed its previous year's membership.
6. Mr. Mike Mitchell, AMS General Counsel, gave an update on the Patient Protection Act lawsuit. A decision is currently pending in the Eighth Circuit Court and an opinion may be rendered by mid-summer.
7. Dr. Gerald Stolz announced the fall meeting will be November 21-22, 1998, at the Red Apple Inn in Heber Springs.
8. Mr. Ken LaMastus presented the membership and budget reports for the period ending February 28, 1998. Mr. LaMastus reported membership was down slightly. This will be reviewed by the staff to determine the reason the numbers are down.
9. Mr. Ken LaMastus discussed the Arkansas Medical Society audit for 1997. Mr. LaMastus reported the Arkansas Medical Society is in sound financial condition with over \$1.2 million in cash and reserves.
10. Mr. Ken LaMastus reported on plans to refinance the Arkansas Medical Society Building. Mr.

LaMastus recommended paying approximately \$250,000 on the loan. Dr. Charles Logan suggested the Arkansas Medical Society consider paying the note down and for the Society to discontinue rent payments and let the other tenant's rent make the mortgage payment. Discussion was held regarding the amount to be paid on the loan with no set amount being determined. Upon motion the Council voted to pursue refinancing of the building and to present the information to the Executive Committee for a decision.

11. Dr. Joe Stallings discussed the recent tragedy in Jonesboro and the outstanding job performed by the physicians and nurses in the emergency room. He thanked everyone for their prayers and support.
12. Mr. Ken LaMastus discussed the MEFFA audit and reported on the MEFFA board meeting held on Thursday. He reported the MEFFA bylaws will be reviewed to consider changes in who can receive contributions.
13. Dr. Charles Logan thanked everyone for their support. He also announced the new Arkansas Medical Society benefit allowing members to make purchases from the Society using Visa or MasterCard on everything except dues.
14. Dr. Michael Moody reported on the Arkansas State Medical Board Regulation 2(6), prescribing controlled substances on a long-term basis and the concerns of many primary care physicians regarding this regulation. Several Council members expressed their concern regarding the Medical Board's lack of attention in reviewing physicians' complaints regarding this issue.

Upon motion, the Council voted to appoint an ad hoc committee made up of physicians with a vested interest in this issue to come with recommendations on how we can best change this regulation and the Executive Committee investigate any possible actions that we may take to expedite correcting the problem.

Upon motion the Council voted in favor of the following amendment made by Dr. John Crenshaw: The Executive Committee shall have the authority to act on behalf of the Council to implement the decisions made by the ad hoc committee and the Executive Committee.

15. Dr. John Crenshaw discussed The Medical Protective Company, a malpractice insurance company that is pulling their business out of Arkansas. They are encouraging physicians to move

their coverage to other carriers. Lynn Zeno suggested everyone visit the exhibitors, which include several representatives of malpractice carriers.

16. Dr. William Jones informed the Council that at least 75% of the federal money that comes to Arkansas for HIV goes for patient services.
17. Dr. Anna Redman asked for the second congressional district to submit three names for the Arkansas State Medical Board position. Council members discussed the process by which nominees for the Arkansas State Board of Health and the Arkansas State Medical Board are determined and how there was a need for improvement in meeting and developing the list of nominees. Dr. Stolz will ask the Bylaws Committee to review the process.

The Council of the Arkansas Medical Society met on Sunday, July 12, 1998, at the Pleasant Valley Country Club in Little Rock and the following business was received and transacted:

1. The Council approved the minutes of the April 2-3, 1998 Council meetings and the May 27, 1998 Executive Committee meeting.
2. Drs. John Burge, Anna Redman, and John Hestir reported on the activities at the AMA Annual Meeting held June 14-18 in Chicago. Dr. Nancy Dickey was installed as president of the AMA and Dr. Thomas Reardon was elected president-elect of the AMA. A few highlights of the meeting include:
 - In regards to establishing the new Medicare Documentation Guidelines the House voted to oppose any documentation system that requires quantitative formulas or assigns numeric values to elements in the medical record.
 - The AMA's Ad hoc Committee Report on the Sunbeam Endorsement was approved with no further action taken.
 - A controversial ethics report that would have put an end to the for-profit sale of nonprescription health-related goods from physicians' offices was tabled and sent back for clarification.
3. Lynn Zeno gave an update on legislative activities in Washington. Lynn expressed concern regarding the House Republican Task Force Managed Care Reform Proposal. This proposal does not address any managed care accountability and expands rather than closes the ERISA loophole

used by insurance companies and managed care entities in order not to comply with state law.

Lynn also reported that two years ago Congress authorized 750,000 medical savings accounts as a pilot project. Only 50,000 policies have been sold nationwide. The Arkansas Medical Society has not found any banks or insurance agents interested in promoting these products in Arkansas.

4. Dr. Michael Moody discussed the proposed Revised Regulation 2(6) that was presented to the Arkansas State Medical Board on June 5, 1998. An ad hoc committee had been appointed to determine how the regulation could be improved. A public hearing to discuss the proposed revised regulation will be held at a date to be announced.
5. David Wroten gave an update on the Arkansas State Medical Board's Centralized Credentials Verification Service. Since it has been in place 2,100 physicians have been credentialed and 25 subscribers have used the service. Expenditures for the project total \$260,000 with income of \$15,500.

The Centralized Credentials Verification Service has asked the Arkansas Medical Society for input regarding mandatory use of the service for physicians, managed care organizations, hospitals, insurance companies, etc. Upon motion the Council voted to endorse the concept of an all-inclusive mandate for the Centralized Credentials Verification Service.

Dr. William Jones requested the Arkansas Medical Society include a list of the entities using the Centralized Credentials Verification Service in its newsletter.

6. Dr. I. Dodd Wilson, Dean of the University of Arkansas College of Medicine, requested to have approximately ten minutes at each Council meeting to discuss the college's activities. Dean Wilson reported on the school's activities and distributed information regarding the number of physicians in the United States, residents by specialty, and results of the 1998 UAMS Resident Match.
- Dr. Wilson also noted for the third year a White Coat Ceremony will be held and the Arkansas Medical Society will participate in the activity.
7. David Wroten discussed the possibility of updating the Medicaid Fee Schedule and reviewing the Consent Decree in the Medicaid lawsuit. David plans to meet with the Arkansas Department of

Human Services to review these issues.

8. David requested the Council to consider opening the Workers' Compensation Commission Fee Schedule for possible revision. He expressed concern because the current plan is one of the best as compared to other states. Upon motion the Council approved researching the revision particularly to get away from the Arkansas Blue Cross Blue Shield standards.
9. Ken LaMastus reported on the activities of the Ad hoc Committee on Prescription Drug Use in Nursing Homes. This committee consists of nursing home medical directors, administrators, and pharmacists and is reviewing how prescription drugs are handled at nursing homes.
10. Ken LaMastus discussed refinancing the Arkansas Medical Society Building and distributed an estimate to the Council regarding fees and interest rates. The refinancing should be completed in the next month.
11. Ken LaMastus gave an update on the "170 Plan", a gift giving program for the Medical Education Foundation for Arkansas (MEFFA). A MEFFA Board meeting will be scheduled for approval of the plan.
12. Chairman Dr. Gerald Stolz discussed a request from the Arkansas Eye Injury Registry/Arkansas Ophthalmological Society to support the ban of bottle rockets. This issue will be discussed at the Arkansas Medical Society fall meeting in November.
13. David Wroten discussed the Arkansas Medical Society Student Mentor Program. The Arkansas Medical Society has collected data from other states and met with student representatives to help formulate the program. David requested Council members who are interested in this project, volunteer to serve on the committee.
14. Upon motion the Council approved Dr. Scott Dinehart of Little Rock to fill the dermatology position on the Medicare Carrier Advisory Committee at the request of the Arkansas Dermatology Society. Dr. William Jones requested Kay Waldo write a letter to Dr. Dinehart to notify him of the appointment.

Ken LaMastus explained this committee is not an Arkansas Medical Society committee and terms cannot be limited, as had been requested at a 1996 Council meeting.

15. The membership and budget reports were presented for information.
16. Dr. Michael Moody reported the Arkansas Medicaid Program had requested an opinion from the Arkansas Medical Society regarding Viagra for the formulary. It was noted birth control pills are not covered and the consensus of the Council was that Viagra should not be covered.
17. Dr. Anna Redman announced she would no longer be eligible to serve as chairman of the Young Physicians Task Force. Upon motion the Council approved Dr. David Murphy of Russellville to replace Dr. Redman as chairman.

The Arkansas Medical Society Council met on Saturday, November 21, 1998, at the Red Apple Inn in Eden Isle and the following business was received and transacted:

1. Chairman Gerald Stolz asked for a moment of silence in memory of Dr. James R. Weber, past president of the Arkansas Medical Society.
2. The minutes of the July 12, 1998 Council meeting, the August 26, 1998 Executive Committee meeting, and the September 9, 1998 Executive Committee conference call were accepted and approval.
3. Ken LaMastus reported a loan had been secured to refinance the Arkansas Medical Society Building at 7.1% fixed rate for 25 years.
4. Ken LaMastus announced the Medical Education Foundation for Arkansas (MEFFA) board of directors had adopted the Section 170 Plan. The savings/retirement plan will be offered to Arkansas Medical Society members starting in December. The tax deductible gift annuity program allows the Foundation to receive funds and will pay a guaranteed annuity retirement income with the funds deposited by AMS members, the funds being mostly tax deductible. In addition, the Foundation will purchase life insurance on the contributor which will provide the Foundation with a future endowment benefit.
5. Dr. Carlton Chambers updated the Council on the Medical Student Section Mentoring Program. The Arkansas Medical Society will contact physician members and students to invite them to participate in the program next year. A committee will match the medical students and physicians. Guidelines have been established for participation in the program.

6. Dr. Chambers also discussed the role of the Continuing Medical Education Accreditation Committee and the Arkansas Medical Society as a recognized accrediting agency for Arkansas. The Accreditation Council for Continuing Medical Education (ACCME) has developed standards by which state medical associations will accredit.

Local institutions and will be responsible for assuring compliance with these standards. Nine hospitals in Arkansas are accredited by the Arkansas Medical Society.

Dr. Chambers noted physicians are needed to serve on the committee and participate in onsite surveys. Those interested should contact David Wroten or Kay Waldo.

7. Lynn Zeno announced the "Day at the Capitol" is scheduled for February 2, 1999. This will be an opportunity for physicians to meet Arkansas representatives. Out of the 100 representatives of the House, 57 are new members. Lynn also encouraged MED-PAC contributions. This year \$31,000 was contributed to 96 candidates and 90 of those were elected. Lynn also invited doctors to participate in the "Doctor of the Day" program.
8. Ken LaMastus presented a membership report. Active, full-year members are down by five members. Ken encouraged the Council to ask their colleagues to join the Arkansas Medical Society. Ken stated from 75-80% of the physicians in Arkansas are members of the Arkansas Medical Society. Dr. Ray Jouett, Chairman of the Arkansas State Medical Board, reported there are approximately 2,800 to 3,000 practicing physicians in Arkansas.
9. Dr. William Jones encouraged everyone to contribute \$200 to MED-PAC to join the President's Club. Dr. Jones noted there are 473 MED-PAC contributors. Lynn reminded the Council of the \$50 state tax credit for MED-PAC contributions.
10. Dr. John Wilson reported on the President's Club meeting. The meeting centered around credentialing, multiple groups looking at charts, and physicians losing control. Dr. Jouett gave an update on the Arkansas State Medical Board's Credentialing Program. Consideration is being given to how the program can be mandated and funded.
11. Dr. Michael Moody gave an update on the Arkansas State Medical Board's revised Regulation 2(6),

a regulation on pain management. A motion was made and approved to support the revised regulation.

12. Dr. Charles Logan encouraged Council members to use the Arkansas Medical Society's web page, www.arkmed.org, which is being updated frequently with news and current events for Arkansas Medical Society members.

Arkansas Medical Society Executive Committee:

The Arkansas Medical Society Executive Committee met on Wednesday, January 28, 1998, at the Arkansas Medical Society office in Little Rock and the following business was received and transacted:

1. Dr. Sandra Nichols discussed the Arkansas Department of Health's decision to move from providing direct medical services to concentrating on public health. She indicated there are concerns about the safety net of many low income people since Arkansas Department of Health will no longer be providing direct medical services. Dr. Nichols reminded us that some of the services that was previously provided generated revenue and the Health Department anticipates a reduction in federal funding.
2. Mike Mitchell pointed out the following information in the Arkansas Medical Society Bylaws. The bylaws states:

Chapter I, Membership: Section 5. Suspension or Termination of Membership

(B) The Executive Committee, after due notice and hearing, may suspend or terminate a person's membership in the Arkansas Medical Society for an infraction of the Constitution or these Bylaws, for a violation of the Principles of Medical Ethics, or for unethical or illegal conduct, subject to the member's right of appeal as provided in Section 6 of this Chapter.

Section 6. Appeals

(A) Any member who may feel aggrieved by the action of this Society or of the member's component society in denying membership, or in suspension or termination, shall have the right to appeal to the Council.

(B) Notice of Appeal shall be filed with the Council within thirty (30) days of the date of the action on which the appeal is taken, and the appeal shall be perfected within ninety (90) days thereof. The decision of the Council shall be final.

(C) The Council Chairman shall have the power to appoint special committees from among the members of the Council to hear appeals; provided no member from the same councilor district as the appellant shall serve on said committee.

(D) The Council shall establish rules and procedures to be followed in hearing appeals and shall furnish these to all parties involved in the appeal upon receipt of the Notice of Appeal.

The Executive Committee asked Ken LaMastus to review the actions of the Arkansas State Medical Board to determine the nature and volume of actions taken as it pertains to members of the Arkansas Medical Society.

3. The Executive Committee reviewed a letter from the American Medical Association pertaining to a physician who is under consideration for revocation of membership because of a disciplinary by the Arkansas State Medical Board. The Executive Committee suggested writing the physician and telling him/her we are considering suspension of their membership based on the information provided by the Arkansas State Medical Board. This information will be included with the letter and a request will be made for any additional information. We would encourage the physician to apply for membership again at the end of their probation period. (A copy of this letter will be provided to the Executive Committee for their approval before being mailed.)
4. The Executive Committee approved the Arkansas Medical Society Alliance's program to establish a scholarship fund for victims of domestic violence.
5. Mr. LaMastus discussed concerns regarding UAMS asking the Society for monetarily support but when the Society asks for their help we run into a blank wall. During a recent request for UAMS to provide accreditation for our annual convention program we were told that UAMS had a program at the same time and in the same town and that our program would be in conflict. The Arkansas Medical Society accredits organizations for CME purposes but it cannot accredit its own programs.
6. The Executive Committee discussed the Statehouse Convention Center requesting a five-year contract for conventions without an escape clause. The Executive Committee agreed they had concerns about scheduling meetings this far out with no

escape clause.

7. Arkansas Blue Cross Blue Shield has decided to provide their fee schedule. At this time the Arkansas Medical Society has sold over 400 copies of the fee schedule. It was decided the Society would notify physicians who request a fee schedule that Arkansas Blue Cross Blue Shield would provide one at no charge but we did not know when it would be available. An option would be given to the physician to purchase our copy of the fee schedule or return their check. The Executive Committee stated they would like to receive the Society's copy of the fee schedule.
8. The Executive Committee approved using the new IRS rate for mileage, 32.5 cents per mile.
9. The Executive Committee approved a list of members requesting direct membership status.

The Arkansas Medical Society Executive Committee meet on Wednesday, February 25, 1998, at the Arkansas Medical Society office in Little Rock and the following business was received and transacted:

1. The Executive Committee reviewed actions taken by the Arkansas State Medical Board against physicians. It was noted in the actions taken in 1997, 61% of these were not members of the Arkansas Medical Society; for the years 1994-1996, 83% were not members.
2. The Executive Committee is recommending the following guidelines for AMS members:
 - No action will be taken on physicians who were placed on probation.
 - Any physician whose license is suspended or revoked will automatically lose their membership. Any physician reapplying for membership will be reviewed by the Executive Committee and membership will be decided on a case-to-case basis.
 - Any physician applying for AMS membership while on probation will be reviewed by the Executive Committee and AMS membership will be decided on a case-to-case basis.
3. The Executive Committee reviewed a document entitled "Procedures for Suspension or Termination of Membership in the Arkansas Medical Society". The Executive Committee felt the document should be reviewed by our legal counsel and presented to the Council. The Arkansas Medical Society Bylaws require this procedure be

written and presented to any physician whose membership is denied or revoked.

4. Dr. Michael Moody reported on the new rules being developed by the Arkansas Department of Health pertaining to HMO's. Dr. Moody indicated the regulations will be reviewed by the Arkansas State Board of Health and available for public comment then presented to the Legislative Council. Dr. Moody pointed out there are no provisions in the old Health Department regulations or the Arkansas Insurance Department regulations for complaints by providers. The Insurance Commissioner will only accept complaints filed by patients. Dr. Moody suggested efforts should be made to include a complaint mechanism for providers.
5. Ken LaMastus reported on a committee consisting of medical directors, pharmacists, and administrators of nursing homes to review information from the government concerning use of medications in nursing homes.
6. Ms. Karen McNiece, President of the Arkansas Medical Society Medical Student Section, reported they will submit several resolutions to the House of Delegates in April. One resolution will ask practicing physicians to be mentors to medical students. She indicated the medical students felt there is a need to communicate with non-academic physicians concerning medical school matters and a mentor program would be beneficial to them.
7. The Executive Committee received a report concerning Congressman Jay Dickey and the Norwood bill. The Norwood bill would remove the ERISA exemption. Representative Dickey is one of two congressmen who originally signed on the bill and later withdrew. Wal Mart lobbyists in Washington are opposing the bill.
8. The Executive Committee approved a list of physicians requesting direct membership status.

The Executive Committee of the Arkansas Medical Society met on Wednesday, May 27, 1998, at the Arkansas Medical Society office in Little Rock and the following business was received and transacted:

1. Dr. Michael Moody reported the Ad hoc Committee to Review Regulation 2(6) had met with Mr. Mike Mitchell, AMS legal counsel, and Mr. William Trice, legal counsel for the Arkansas State Medical Board. The committee approved a proposed revision drafted by Mr. Mitchell. After Dr.

Moody met with Dr. Ray Jouett, Chairman of the Arkansas State Medical Board, other minor changes were made. The Executive Committee approved these changes subject to the ad hoc committee's approval. These changes have been mailed to the ad hoc committee for their review.

2. Mr. Ken LaMastus reported on the 170 Plan for MEFFA. He indicated he had been in negotiations with Foundation Benefits, Inc. and they had requested an endorsement by the Arkansas Medical Society. The Executive Committee agreed to endorse the 170 Plan.
 3. Mr. LaMastus reported on refinancing the Arkansas Medical Society building. Berkshire Insurance Company who currently has the loan has expressed an interest in refinancing the building. As soon as information is received from Berkshire it will be mailed to the Executive Committee and a conference call will be scheduled.
 4. The Executive Committee reviewed information from the Arkansas State Employees Association concerning their health care plan. The association expressed concern about the significant increase in the number of prescriptions being filled (25%) and asked if the Executive Committee had any opinion as to why this might have occurred. Several explanations were offered which centered around the use of drug cards where patients pay a reduced fee for prescriptions. This encourages getting more prescriptions filled. Also, more patients are requesting prescriptions due to advertising by major drug companies.
 5. The Executive Committee reviewed a document entitled, "Medical Record Audit Tool for Documentation Only" which will be used by AFMC under its contract with Medicaid to review medical records in doctors' offices. Dr. Moody reported AFMC will be using the Hedis Criteria and only primary care providers will be reviewed.
 6. The Executive Committee reviewed the nominations for the second congressional district position on the Arkansas State Board of Health. Nominations from the 1998 House of Delegates were Drs. Kenneth Meacham of Searcy, William Jones of Little Rock, and Robert Rook of Conway. After reporting to the Executive Committee that Dr. Rook is not a member of the Arkansas Medical Society, the Executive Committee recommended the staff contact Drs. Gary Wright of Conway, J. Shelby Duncan of Benton, and Sandra Young of Dardanelle to see if they are willing to be nominees.
 7. The Executive Committee reviewed a report from AMS Benefits, Inc. Mr. David Wroten reported a significant increase in the number of people enrolled in the insurance plan through American Investors Life Insurance Company. A board meeting will be held in conjunction with the next Council meeting.
 8. The Executive Committee reviewed a list of physicians who have not renewed their membership for 1998. Several Executive Committee members indicated they have already made contact with some of these physicians and will be making additional contacts.
 9. The Executive Committee approved a list of physicians requesting dues exempt status and direct membership.
 10. The Executive Committee reviewed and recommended the childhood immunization schedule proposed by the Arkansas Department of Human Services. The schedule is recommended by the American Academy of Pediatrics and the American Academy of Family Physicians.
 11. Dr. Moody discussed a letter he wrote to David Howell, Executive Director of the Arkansas State and Public School Employees Insurance Office, requesting they consider having two point of service option plans for their health insurance program.
 12. The Executive Committee reviewed material from the Arkansas Department of Human Services concerning laboratory procedures performed as a part of the EPSDT and Preventive Health Screens. The Medicaid proposed requirement will give primary care physicians more control of the tests being performed under these programs. The Executive Committee endorsed the changes.
 13. Dr. Carlton Chambers discussed the fact that the ARKids First program does not cover hearing examinations. He stated this is a major problem with children's ability to learn. Dr. Moody and Mr. Wroten will look into this matter.
- The Executive Committee of the Arkansas Medical Society met on Wednesday, August 26, 1998 at the Arkansas Medical Society office in Little Rock and the following business was received and transacted:**
1. Dr. Michael Moody discussed a conversation he had with Dr. Ray Jouett, Chairman of the Arkan-

sas State Medical Board, concerning "Draft 3" of the proposed revision of Regulation 2(6). The Executive Committee approved "Draft 3".

2. The director position of the Arkansas Department of Health was discussed. The Executive Committee did not have any recommendations for the position.
3. A grant application for \$15,000.00 to promote collaboration between the Arkansas Medical Society and the Arkansas Public Health Association on health policy was reviewed. This grant is cosponsored by the American Medical Association and the American Public Health Association with support provided by the Robert Wood Johnson Foundation. The Executive Committee approved the request for the grant.
4. A request for a \$1,000 contribution to educate Arkansans on the seatbelt law was discussed. Efforts will be made to make the seatbelt law a primary law. Current law states that a person can be fined for not using a seatbelt if they are stopped for another traffic violation. A primary seatbelt law would allow police officers to stop motorists they see who are not wearing seatbelts. The committee approved a \$1,000 contribution subject to approval by the Budget Committee.
5. A list of recommended new services the Arkansas Medicaid Program will offer to their providers was reviewed. While the Executive Committee praised the Arkansas Medicaid Program for its electronic billing and AEVCS system, the committee had concerns about publishing updates and official notices on the Internet. It was pointed out that many physicians have Internet at home instead of the office.
6. A list of ambulatory surgery center codes was reviewed. Arkansas Blue Cross Blue Shield will no longer reimburse for a large number of facility charges. The Executive Committee recommended the list be mailed to specialty officers for their review and to let the Arkansas Medical Society know if there were problems associated with performing these procedures in an office setting.
7. A complaint from Ms. Violet Sue Collins was reviewed. The Executive Committee instructed Ken LaMastus to write Ms. Collins a letter indicating they were sorry for the bruising that occurred during her mammography, however, in some cases this is unavoidable.

The Arkansas Medical Society Executive Com-

mittee met by conference call on Wednesday, September 9, 1998 and the following business was received and transacted:

1. The Executive Committee approved refinancing the building with stipulations. The loan will be for \$1.25 million with a 7.1% interest rate, fully amortized, with a non-recourse loan which is assumable with penalties. There will be a clause in the contract stating if interest rates drop and the building loan is paid off early the difference will be paid to the insurance company. Mike Mitchell indicated he had reviewed the documents.

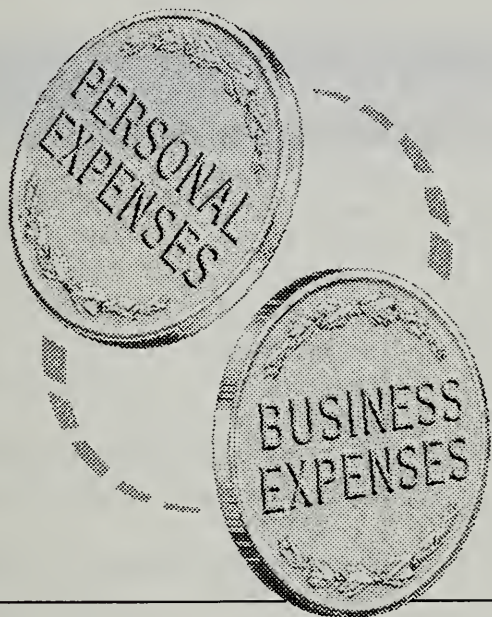
The Executive Committee authorized Ken LaMastus and Dr. Carlton Chambers, as secretary to the Arkansas Medical Society, to sign the document of intent.

2. Mike Mitchell discussed the recent Eighth Circuit Court decision on the Patient Protection Act lawsuit. The Executive Committee agreed not to appeal this lawsuit further.
3. The Executive Committee briefly reviewed a complaint from a person who had been charged a fee for interviewing an obstetrician/gynecologist for potential services. The Executive Committee stated that some physicians charge a fee. It should be well understood at the time the appointment is being made there will be a charge for the interview. Mr. LaMastus will check further and will respond to the person who complained.

The Arkansas Medical Society Executive Committee met by conference call on Monday, November 9, 1998 and the following business was received and transacted:

1. Dr. Dwight Williams made a motion to approve the Certificate of Secretary which was faxed to the Executive Committee. Dr. Michael Moody seconded the motion and the vote was unanimous to approve the certificate.
2. The Certificate of Secretary is an agreement to be presented to the Federal Home Life Insurance Company formalizing the loan agreement on the Arkansas Medical Society Building.

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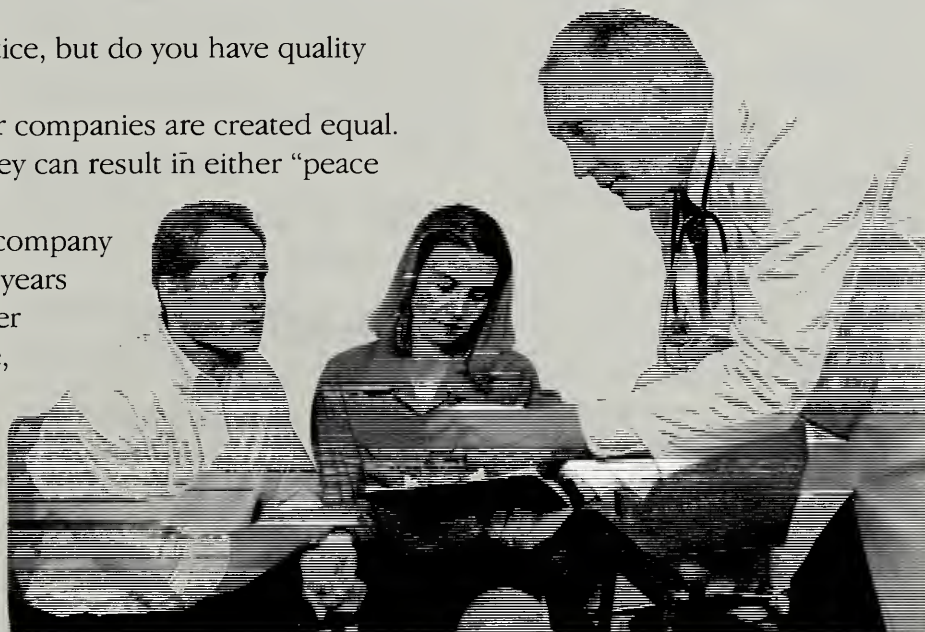
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Mrs. Charles Rodgers
Thomas Rooney
Ashley Ross
Edward Saer
Michael Sangster
Ian Santoro
Scott M. Schlesinger
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Eddie Shields
John Shock
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Douglas Smith
R. Allen Stanford
Robert Stanley
Wanda Stephens
Jack Sternberg
Marguerite Stewart
J. Samir Sulieman
Jan Sullivan
David Taylor
Bill Trantum
Jyi-Ming Tseng
W. Everett Tucker
Duane Velez
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Thomas Ward
Charles Watkins
Edward Weber
Michael Weber
Samuel Welch
Kent Westbrook
Alonzo Williams
Ronald Williams
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White County

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John Henderson
Larry Killough
Robert Lowery
Kenneth Meacham
Robert Riddick
William White

Out of state

Gregg Gober

MEMORIALS

Members of the Arkansas Medical Society who have died this past year will be remembered during the opening House of Delegates beginning at 3:30 p.m., Thursday, April 29, 1999, at the Park Hilton Hotel in Hot Springs. Members to be honored are:

Society Members:

C. Harold Beasley, M.D., Heber Springs
Banks Blackwell, M.D., Pine Bluff
Bruce B. Brown, Jr., M.D., Springdale
Edward P. Hammons, M.D., Forrest City
Alfred B. Hathcock, M.D., Fort Smith
Harold B. Hawley, M.D., Little Rock
Charles R. Henry, Sr., M.D., Little Rock
Keith B. Kennedy, M.D., West Memphis
Albin J. Krygier, M.D., Horseshoe Bend
Robert D. McKinney, M.D., Greenwood
Steven M. Moore, M.D., Jonesboro
Gordon P. Oates, M.D., Little Rock
Claud F. Peters, M.D., Malvern
J. Kenneth Thompson, M.D., Santa Barbara, California
Thomas P. Thompson, M.D., Hot Springs
James R. Weber, M.D., Little Rock



Cardiology Commentary and Update



Nellie Kazzaz, M.D.*

Mark St. Pierre, M.D.*

J. David Talley, M.D.*

Myocardial Infarction in a Patient with "Normal" Coronary Arteries

Acute coronary syndromes [sudden cardiac death, myocardial infarction (MI), and unstable angina pectoris] are the leading cause of death in the United States. While coronary atherosclerosis is the underlying etiology in more than 90% of patients with an acute coronary syndrome, non-atherosclerotic causes are occasionally seen. Non-atherosclerotic etiologies include thromboembolism, a hypercoagulable state, perimyocarditis, coronary artery vasospasm, thrombosis with spontaneous thrombolysis, chest trauma, aortic dissection, cocaine use, and carbon monoxide poisoning.

We recently cared for a patient who sustained an anterolateral MI and had "normal" coronary arteries at the time of cardiac catheterization. We review the potential etiologies of this unusual condition.

Patient Presentation

History: A 51 year-old male was presented with testicular pain and swelling (see Complete Problem List, Table 1). He had an 80 pack-year history of cigarette use. He was admitted to the hospital with the diagnosis of epididymo-orchitis and begun on intravenous antibiotics. On the third hospital day, he became acutely short of air and his blood pressure plummeted. An electrocardiogram revealed ST segment elevation in anterolateral and inferior leads consistent with an epicardial injury current (Fig.1). He received aspirin, heparin and rt-PA.

Hospital course: Promptly after receiving thrombolytic therapy, the shortness of air and ST elevation

Table 1: Complete Problem List

1. Epididymo-orchitis
2. Substance Use
 - A. Cigarettes, 80 pack year history
3. Cardiac Diagnosis

Etiology: Non atherosclerotic coronary artery disease.

Anatomy: Cardiac Catheterization: "normal" coronary arteries

Physiology: ECG: ST segment elevation in anterolateral and inferior leads

Left ventriculography: ejection fraction 30-35%

Functional: III

Objective: B

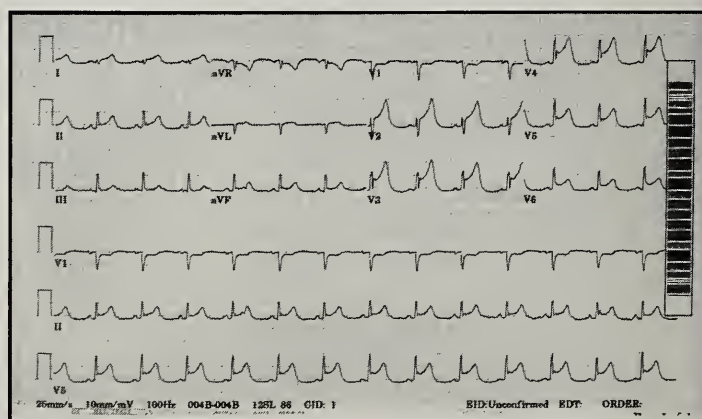


Figure 1. Twelve lead electrocardiogram shows normal sinus rhythm, rate 90, with normal axis, and ST-segment elevation in the anterolateral and inferior leads (V₂ - V₆ and II, III, A_{VF}) consistent with an epicardial injury current.

* Drs. Kazzaz, St. Pierre and Talley are from the Department of Internal Medicine and the Division of Cardiology UAMS Medical Center and the John L. McClellan Memorial Veterans Hospital

resolved. The peak total CK was 942 IU/L and the CK-MB was 93 ng/mL. Several days later, he was taken to the cardiac catheterization laboratory where a coronary angiogram revealed "normal" coronary arteries. There was no evidence of hypercoagulability (proteins C and S, antithrombin III and activated protein C were normal). Factor V showed no mutations and a ventilation-perfusion scan was interpreted as low probability for pulmonary embolism. He was discharged home on aspirin and a calcium channel blocker. He remains asymptomatic.

Discussion

There are multiple potential etiologies of MI in a patient with angiographically "normal" coronary arteries. We explored several conditions in this patient.

Thromboembolism of Coronary Arteries

Any physiologic or anatomic abnormality of the heart leading to stagnant blood flow (atrial fibrillation, mitral valve stenosis) or a pathologic abnormality (vegetation, atrial myxoma) may cause of thromboembolism of a coronary artery. Our patient had no history of dysrhythmias and was in sinus rhythm on his electrocardiogram. An echocardiogram did not reveal a structural abnormality. Therefore, this etiology would appear unlikely.

Hyper-coagulable State

In this patient, a complete hypercoagulability evaluation was unrewarding. Neither a congenital (e.g., dysfibrinogenemia or protein C or S deficiency) or acquired (e.g., systemic lupus erythematosus or systemic vasculitis) abnormality was detected.

Perimyocarditis

Perimyocarditis may mimic an acute MI or be due to a MI. In one study of 18 patients with infectious perimyocarditis, 14 (78%) had chest pain, marked ST segment elevation, and an elevated CK-MB level. This was considered in our patient since he was being treated for epididymo-orchitis, however, multiple blood cultures were negative. An echocardiogram showed a focal wall motion abnormality in the anterior-lateral segment consistent with a MI rather than falsely elevated cardiac enzymes with myocarditis.

Coronary Artery Vasospasm

Osler in 1910, was one of the first to suggest that an acute coronary syndrome could have a non-atherosclerotic etiology when he described a patient who had normal coronary arteries by autopsy yet had classic angina pectoris. Since then, the pathophysiology of coronary artery vasospasm has been extensively

investigated and elucidated.

Coronary artery spasm may occur in the small intramyocardial vessels or the large epicardial arteries. Decreased blood supply in the small intramyocardial resistance vessels are responsible for symptoms of variant angina or angina at rest. Small vessel coronary disease causing myocardial ischemia should be considered when, at the time of cardiac catheterization, the coronary arteries are widely patent yet there is sluggish flow of the contrast medium down the vessel. Endomyocardial biopsies in patients with this condition show pathologic small coronary arteries with fibromuscular hyperplasia, hypertrophy of the media, myointimal proliferation, and endothelial degeneration.

Many patients with an acute coronary syndrome and "normal" epicardial coronary arteries at the time of routine coronary angiography have abnormal arteries with more sophisticated testing. High-resolution coronary angiography, intravascular ultrasound, or post-mortem examination may show mild atherosclerosis in these vessels. Angiographically "normal" yet functionally abnormal coronary vessels may be detected by the response of the vessel to an intracoronary injection of acetylcholine. In normal vessels, acetylcholine stimulates the release of endothelium derived relaxing factor (EDRF) and causes vasodilatation. Abnormal vessels damaged by atherosclerosis, vasoconstrict in response to acetylcholine.

The most common risk factor for coronary artery spasm is heavy cigarette use. Thus, in our patient, cigarette use may have predisposed him to the MI.

Thrombosis

Spontaneous thrombus formation that dissolves is a leading cause of non-atherosclerotic MI. These angiographic insignificant lesions may fracture or erode at the "shoulder" portion of the plaque. Plaque rupture may be due to an increase in tension around the coronary artery circumferentially to a point that exceeds its tensile strength. This is a potential etiology in our patient.

Management and Prognosis of Coronary Artery Spasm

Initially, the acute MI is treated in a routine fashion with either pharmacologic (aspirin, heparin, and thrombolytic agent) or mechanical therapy (balloon angioplasty). Once stabilized, calcium channel blockers and nitrates are used to prevent coronary artery spasm. A daily aspirin is essential for antiplatelet therapy. The prognosis of patients with non-atherosclerotic coronary artery disease who sustain a MI is directly related to the degree of left ven-

tricular dysfunction and presence of ventricular arrhythmias.

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Board Certified Pediatrician Needed

Board Certified Pediatrician with current internal medicine and psychiatric experience needed to adjudicate applicants for SSA disability. Evaluation is based on review of medical records and no personal contact with claimants is required.

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State Health Watch

Information provided by the Arkansas Department of Health, Division of Epidemiology

Update on the Current Multistate Outbreak of Listeriosis

As of February 8, 1999, at least 73 cases of illness caused by a rare strain of *Listeria monocytogenes*, serotype 4b, have been reported to the Centers for Disease Control and Prevention (CDC) by 14 states. Sixteen deaths have been reported, 11 adults and 5 miscarriages/stillbirths. CDC and state and local health departments have identified the most likely vehicle for transmission as hot dogs and possibly deli meats produced under many brand names by one manufacturer, Bil Mar Foods. Reported illness onset dates were during August 2, 1998-January 16, 1999. Although some of the products implicated in the outbreak were distributed in Arkansas, no cases of listeriosis have been reported in Arkansas as yet.

On December 22, 1998, the manufacturer voluntarily recalled specific production lots of hot dogs and deli meats that might be contaminated. CDC later isolated the outbreak strain of *L. monocytogenes* from an opened and a previously unopened package of hot dogs manufactured at the company's plant in Michigan. To date, over 15 million pounds of products have been recalled during this investigation.

Processed meat products produced by other manufacturers have since been found to contain *L. monocytogenes*, with subsequent recall of the contaminated lots. No listeriosis cases have been linked to consumption of these lots.

As a result of the news releases regarding the illnesses and recalls, many consumers, some with illnesses, have contacted health departments and medical providers. While most cases of foodborne disease present with symptoms of gastroenteritis, and healthy persons often contract bacterial or viral gastroenteritis, listeriosis symptoms are not usually gastrointestinal. Listeriosis is usually manifested as meningoencephalitis and/or septicemia in newborns and adults and abortion in pregnant women. Healthy persons rarely develop severe illness from *Listeria*. The illness occurs primarily in pregnant women, newborns, and persons with impaired immunity caused by serious illness, such as acquired immunodeficiency syndrome or cancer. *Listeria* infections

during pregnancy may cause an influenza-like illness with fever and chills, and may lead to loss of the fetus. In other persons, early symptoms can include fever, severe headache, and stiff neck. Illness can begin 2-8 weeks after eating the contaminated food.

Consumers who have any of the affected product should not eat it, but rather should discard it or return it to the point of purchase. The risk for developing *Listeria* infection after eating a contaminated product is low. Persons who have eaten a contaminated product and do not have any symptoms do not need any special medical evaluation or treatment, even if they are in high-risk groups. However, persons in high-risk groups who have eaten the contaminated product, and within 2 months become ill with fever or influenza-like illness, should inform their physicians about this exposure. Because of this long incubation period, cases may continue to occur and be reported for several weeks after an effective recall.

Information is available from varied sources regarding listeriosis and the investigation of individual cases. Consumers who have questions about the recall or the products involved should contact Bil Mar Foods, telephone (800) 247-8339. Persons who have questions about *Listeria* should call their local or state health department. The Arkansas Department of Health, Epidemiology Division, may be reached at (800) 554-5738, ext. 2893, during normal working hours. Information may also be obtained by visiting the CDC World-Wide Web site, www.cdc.gov/ncidod/diseases/foodborn/lister/htm. General questions about meat handling should be directed to the U.S. Department of Agriculture's Meat and Poultry Hotline, telephone (800) 535-4555, Monday - Friday, from 10 a.m. to 4 p.m. eastern time.



Reported Cases of Selected Diseases in Arkansas Profile for December 1998

The 3 month delay in the disease profile for a given month is designed to minimize any changes that may occur due to the effects of late reporting. The numbers in the table below reflect the actual disease onset date, if known, rather than the date the disease was reported.

Disease Name	Total Reported Cases 1998*	Total Reported Cases 1997	Total Reported Cases 1996
Campylobacteriosis	176	175	241
Giardiasis	167	220	182
Salmonellosis	616	445	455
Shigellosis	211	273	176
Hepatitis A	85	223	500
Hepatitis B	110	106	93
Hepatitis C	5	5	7
Meningococcal Infections	32	38	35
Viral/Aseptic Meningitis	76	26	38
Ehrlichiosis	13	22	7
Lyme Disease	7	27	27
Rocky Mtn Spotted Fever	24	31	22
Tularemia	25	24	24
Measles	0	0	0
Mumps	13	3	1
Gonorrhea	3962	4388	5050
Syphilis	293	394	706
Pertussis	93	60	14
Tuberculosis	170	200	225

*1998 data are provisional

For a complete list of reportable diseases in Arkansas, call the Arkansas Department of Health, Division of Epidemiology, at (501)661-2893 during normal business hours.

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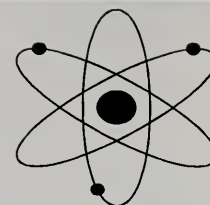
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Radiology Case of the Month

Authors: David A. Hays, M.D.
Michael V. Beheshti, M.D.
Frederick A. Meadors, M.D.
Editor: Steven R. Nokes, M.D.



History

A 47-year-old female presented with hemoptysis. She had previously undergone surgical resection of a malignant thymoma which required sacrifice of the right phrenic nerve. She also subsequently underwent particle beam irradiation to the thorax. Other significant history included aplastic anemia with chronic severe thrombocytopenia. A CT scan of the thorax and a thoracic aortogram were performed (Figures 1 & 2).

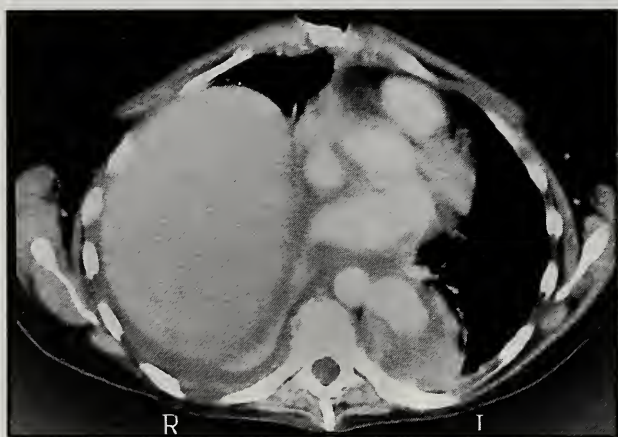


Figure 1. CT scan of the chest



Figure 2. Thoracic arteriogram

Editor: Steven R. Nokes, M.D., Radiology Consultants in Little Rock
Author: David A. Hays, M.D., Radiology Consultants in Little Rock
Author: Michael V. Beheshti, M.D., Radiology Consultants in Little Rock
Author: Frederick A. Meadors, M.D., Practicing in Little Rock

Diagnosis

False Aortic Aneurysm (Penetrating Thoracic Ulcer)

Findings

The CT scan (Figure 1) demonstrates a defect in the posterolateral wall of the descending aorta with surrounding clot. The thoracic aortogram (Figure 2) nicely demonstrates the false aneurysm which has a well-defined neck. During endovascular repair a Dacron covered Nitinol stent was deployed across the aneurysm (Figure 3). Follow-up angiogram and CT scan after stent-graft deployment demonstrate exclusion of the false aneurysm without evidence of an endoleak (Figures 4 & 5).

Treatment

Intra-aortic Stent Graft

Discussion

The estimated annual incidence of thoracic aortic aneurysms is six cases per 100,000 persons. The descending thoracic aorta is involved in approximately 40% of patients, the ascending aorta in 50%, and the aortic arch in the remainder. Descending thoracic aortic aneurysms are primarily caused by atherosclerosis; less common causes include trauma (including iatrogenic), infection, connective tissue disorders such as Marfan's syndrome, and congenital aortic anomalies. Left untreated these aneurysms progressively enlarge and eventually rupture. Of those followed medically, 40-70% developed rupture with more than 90% being fatal. Most patients are asymptomatic. In those with symptoms, back or chest pain are the most common. Other signs and symptoms include compression or erosion of adjacent structures, such as hoarseness from stretching or compression of the left recurrent laryngeal nerve; respiratory symptoms resulting from tracheal or smaller airway compression; hemoptysis from bronchial or pulmonary erosion; dysphagia from esophageal compression; and superior vena cava syndrome.

The traditional therapy for patients with thoracic aortic aneurysms is surgical repair. Although there have been significant advances in both intraoperative and postoperative management, operative mortality ranges from 5-20% in large series. Transluminally placed endovascular stent grafts are an attractive alternative that may potentially reduce operative risk and perioperative morbidity. In a series reported from Stanford University operative mortality was 7% with endovascular repair, with actuarial survival estimates of 87% at one year, and 81% at four years, which compares with a five year actuarial survival estimate of 70-79% for patient undergoing open surgical repair. With the patient's history it was felt that endovascular repair was the best option for treatment. The patient was accepted into an FDA monitored emergency use protocol for deployment of the stent graft which was engineered and produced by World Medical Manufacturing (Sunrise FI). After her endovascular procedure the patient was discharged home on the fourth postoperative day. While early results suggest that these less invasive endovascular procedures may be associated with less early morbidity compared with open surgical repair, further investigation and follow-up are necessary to validate this approach for aneurysm repair.

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Figure 3. Nitinol stent



Figure 4. Post stent thoracic arteriogram

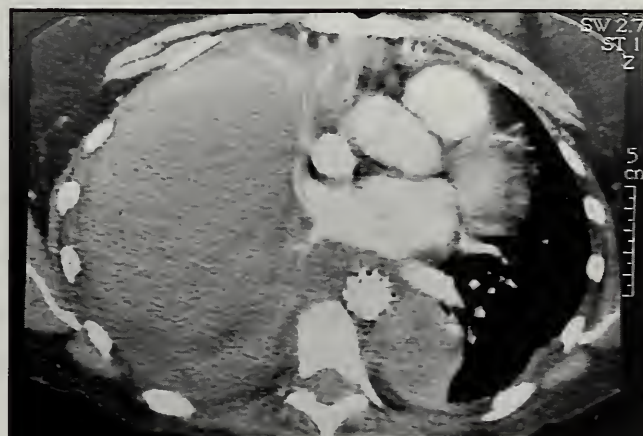
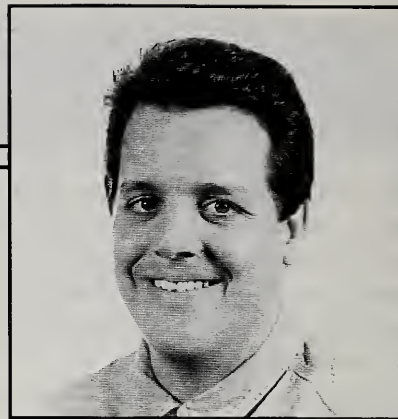


Figure 5. Post stent CT scan of the chest

New Member Profile



Wayne L. Bruffett, M.D.

PROFESSIONAL INFORMATION

Specialty: Orthopedic Spine Surgery

Years in Practice: One

Office: Little Rock

Other Business Affiliates/Organizations: Arkansas Specialty Orthopedics, Pulaski County Medical Society and the American Medical Association

PERSONAL INFORMATION

Spouse: Shawnee Nolen Bruffett

Date/Place of Birth: August 13, 1965, Springfield, Missouri

Hobbies: Home improvement projects, fishing, sports

THOUGHTS & OTHER INFORMATION

When I was a child, I wanted to be: a robber

One of my pet peeves: selfish people

Worst Habit: subjecting others to Bluegrass music during surgery

Best Habit: I try to see some humor in everything

The turning point of my life was when: I met my bride

One goal I am proud to have reached: Having a happy home

One goal I haven't achieved yet: having a house full of kids like my partners

What people say behind my back: "Ask Bruffett...he'll do it."

People who knew me in medical school, thought I was: the janitor, because I wore overalls to most lectures and carried my lunch in a small cooler

First Job: stock boy

Worst Job: oil field worker in south Texas

If I had a different job, I'd be: the proud owner of "Bruffett's Minnow Farm"

One word to sum me up: optimistic

My Life's philosophy: "Kindness is more important than wisdom, and the recognition of this is the beginning of wisdom" Theodore Isaac Rubin, M.D.

New Members

Danville

Smith, Raleigh A., General Surgery.
Medical Education, University of Texas Southwestern, Dallas, 1979. Residency, St. Paul Hospital, Dallas, Texas, 1980. Internship, Charleston Area Medical Center, 1984.

El Dorado

Williams, Robert S., Family Practice.
Medical Education, American University of the Caribbean, Montserrat, British West Indies, 1991. Residency/Internship, AHEC – South, El Dorado, Arkansas, 1998.

Fayetteville

Sharkey, Martha Ann, Pediatrics.
Medical Education, Vanderbilt, Nashville, Tennessee, 1995. Internship/Residency, Johns Hopkins University School of Medicine, Baltimore, Maryland, 1996/1998. Board Certified

Fort Smith

Aclin, Richard R., Pediatrics.
Medical Education, UAMS, Little Rock, 1964. Internship, Arkansas Baptist Hospital, 1965. Residency, UAMS, Little Rock, 1968. Board Certified.

Gaby, Cecil Walter, Pediatrics.
Medical Education, University of California, Davis, 1987. Internship/Residency, Sinai Hospital of Baltimore, 1988/1990. Board Certified.

Gills, Edward Larry, Family Practice.
Medical Education, University of Texas Medical Branch, 1994. Internship/Residency, Scott and White Memorial Hospital, 1995/1997. Fellowship, University of Mississippi Medical Center/Methodist Hospitals, 1998. Board Certified.

Jonesboro

Cisneros, Teresa C., Psychiatry.
Medical Education, UAMS, Little Rock, 1993. Internship/Residency, UAMS, Little Rock, 1994/1998.

Little Rock

Osborne, Lester Keith, Family Practice.
Medical Education, University of Calgary, Calgary, Alberta, Canada, 1981. Internship/Residency, Calgary General Hospital, 1982/1984. Board Certified.

Malvern

Hester, Wes, Family Practice.
Medical Education, UAMS, Little Rock, 1995. Internship/Residency, AHEC – Southwest, Texarkana, Arkansas, 1996/1998. Board Certified.

Monette

Lamb, Trent R., Family Practice.
Medical Education, UAMS, Little Rock, 1995. Internship/Residency, AHEC – Northeast, Jonesboro, Arkansas, 1995/1998. Board Eligible

Mountain View

Dibrell, Fredrick S., Pediatrics.
Medical Education, University of Tennessee, Memphis, 1994. Internship/Residency, UAMS, Little Rock, 1996/1998. Board Certified.

Newport

Jones, Karen D., Obstetrics and Gynecology
Medical Education, UAMS, Little Rock, 1992. Internship/Residency, St. Louis University, 1993/1996. Board Certified.

Russellville,

Allison, Russell B., Orthopaedics
Medical Education, UAMS, Little Rock, 1993. Residency, UAMS, Little Rock, 1994 and University of Allegheny, Allegheny General Hospital, 1998. Board Eligible.

Turner, Charles R., Emergency Medicine.
Medical Education, UAMS, Little Rock, 1950. Internship/Residency, Miami Valley Hospital, Dayton, Ohio, 1950/1954. Board Certified.

Residents/Interns

Ghafoor, Abid, Anesthesiology
Medical Education, Quaid-e-Azam Medical College, Bahawalpur, Pakistan, 1993. Internship, Pakistan Institute of Medical Sciences. Residency, UAMS, Little Rock.

Sayani, Namrata, Ophthalmology
Medical Education, MS University of Baroda, Gujarat, India. Internship, MS University of Baroda, Gujarat, India, 1995. Residency, UAMS, Little Rock.

Students

Duffy, Laura
Morgan, James

Nelson, Tyler
Smith, Jason

Gordon P. Oates, M.D. April 10, 1919 – January 17, 1999

April 10, 1919 – January 17, 1999

Gordon Page Oates lived a full and rich life and today while we mourn his passing we celebrate the joy having had the opportunity to know him. He came from a stubborn, hardworking Scotch-Irish background steeped in the intensity of his grandparent's Associate Reformed Presbyterian Church – one that honored the Sabbath to the extent that you didn't watch baseball or read the paper on Sunday. His own parents were relatively rebellious to this perspective on life, but you can still see the legacy in many aspects of the life of Gordon Oates.

His real joy was very evident to those who knew him in his early days at Fayetteville, where he started his lifelong love affair with a popular cheerleader and the Razorbacks. He was said to be one of the best dancers on campus and charmed Will Etta Long into staying in Arkansas and becoming his partner for life. Absolutely devoted and in love with Willie, they were consummate dance partners from the time they met at the University, and both would rather dance than eat. As many of you know, even after Dad couldn't remember your name, he could still do a great jitterbug. Even when he first went to Presbyterian Village, he was still dancing.

Dad was crazy about Mother and romanced her his whole life. Even after the effects of Alzheimer's had removed so much of his memory. He would look at Mother quizzically and smile and ask her if she would like to go home with him.

Medicine was more than just Dad's chosen field. It was his calling, his life's work, his service to humanity. I think that anyone, who knew Gordon Oates, would appreciate the fact that he was first and foremost a dedicated, talented, competent family physician. Many of you who may have been patients of Dad's have told us over and over how important a role he played for you. There were innumerable nights, weekends, even Christmases that found Dad going out to meet the needs of patients in the kind, compassionate manner in which he always practiced medicine. The practice of medicine was so much a part of Dad, that when he first became a patient at Presbyterian Village, he would fall into the role of



physician, taking pulses and checking on the other patients –being in a place of caregiving, he felt most at home giving care.

The navy took him as a Lt. J.G. to heal the sick and the wounded in the Pacific Theater of World War II. He worked on both G.I.s and on Japanese prisoners of war. He was even slated to be part of the invasion of Iwo Jima but fortunately his ship broke down in route and he returned safely.

After the war he returned to practice medicine here in Little Rock and start a family. Having stayed in the Naval reserve after World War II, he was reactivated during the Korean war and stationed in San Diego, where he and Mother finished out the family with a girl, my sister Dr. Debbie.

As a Father, Dad had very high standards for his children – he wanted us to be better, smarter, greater... everything more than he was. As a teacher and role model he expected perfection. These were difficult standards to meet. But these were standards that he expected of himself. Being born 10 years apart Dad was different for both of us. For me he wanted to share his pleasure in the variety of life and exposed me to as many different experiences as possible, from eating Chinese food with chopsticks when I was only nine years old, to visiting every historical monument between here and San Diego. For Debbie, Dad was a role model of wisdom and inner spiritual strengths, answering all of the hard questions, and showing tenderness and support in whatever she pursued – be it ballet or anthropology. For both of us he was a man of complete integrity. He was a real straight arrow – there were no shortcuts for him.

Dad returned to his practice in Little Rock and eventually moved into Public Health work as Pulaski County Health Officer. It was his way to reach out and affect healing for more people across a broad spectrum. In spite of the long hours and dedication of

being a physician he also found meaning and personal satisfaction in his Masonic work.

He described Masonry as a system of morality and all of you who knew Gordon Oates would remember how much Masonry meant to him. One of his finest years was when he served as Potentate of the Shrine Temple. He also was able to use his special talents for memorizing huge amounts of text for concistry. Masonic work was a place where Dad could integrate his spirituality as well as his devotion to the community and his fellowman. Masonic work was certainly a place where Dad's character and integrity were honored in a special way. I think he would agree that being taken into the honorary 33rd degree of Scottish Rite was one of, if not the greatest achievement of his life.

Dad was certainly intense and dedicated, but he also had a lot of fun in his life. He and Mother went to Shrine events all over the country. They loved going to the races at Hot Springs with his Sister Susie Donnelly and her husband the Judge. Dad wasn't a big better, too much Scotch-Irish in his blood to make large wagers on games of chance, but he reveled in figuring out the racing form and no one could read the form and study the horses with more intensity than Dad. He could make a science out of going to Oaklawn.

It is a tribute to Dad that he had such a strong group of close friends "The Friday Night Group" also known as the POETS. Although he often had difficulty making enough time in his work schedule, Dad had many outside interests that he shared with these friends: He loved to play golf, loved to travel, and loved the occasional trek to the duck club. And how

he loved the Razorbacks.

He and the pallbearers here today can testify that Gordon Oates started wearing red Razorback stuff long before it became popular. He was such a football fan that he and Mother spent their honeymoon in New Orleans and went to the Sugar Bowl to see Fordham and the "7 Blocks of Granite" play Missouri. Any of us that remember being at a football game anywhere in the same section of War Memorial Stadium can remember Gordon standing up and screaming such politically incorrect expressions to the officials. And bemoaning the fact after a particularly inept play that the team looked like "Ned in the first reader." But he supported the Razorbacks and attended the games no matter what.

Gordon Page Oates, certainly lived a very full life. He was a devoted son looking after his parents until their death. He raised and sent his children to college with strong values and a desire to succeed. He loved and sometimes spoiled "his Princess" as he called Mother. He shared great times with his sister Susie and reveled in the trips to the races in Hot Springs. And as most of you know, he was a loyal and trusted friend. Finally, to society he gave more than he got. Although the last, most recent years of Dad's life with Alzheimer's did not allow him to be actively involved in our lives, today allows us to bring back and honor the very best qualities of a man who honored the best qualities in us. Gordon Page Oates lived his life with great gusto and intensity, and was the absolute epitome of integrity. We are blessed to have had him in our lives.

So Mote It Be.

Submitted by Deborah O. Erwin, Ph.D. and Randy Oates

In Memoriam

Banks Blackwell, M.D.

Dr. Banks Blackwell of Pine Bluff, passed away Monday, January 17, 1999. He was 64. He is survived by his wife Marlyn Goldman Blackwell; sons, G. Lawrence "Larry" Blackwell, III, and Len Banks Blackwell, both of Dallas, Texas; daughter, Leigh Ann Ayres of Atlanta, Georgia; brother, Alan Blackwell of Little Rock; sister, Ann Blackwell Sullivan of Louisville, Kentucky; and five grandchildren.

Thomas P. Thompson, M.D.

Dr. Thomas Thompson of Hot Springs, passed away October 8, 1998. Dr. Thompson was survived by his wife, Glee; three daughters, Lisa McGinn of Dallas, Texas; Susan McNabb of Conway, AR; Anna Thompson, of Hot Springs, AR; a son, Thomas P. Thompson, III, of Dallas, Texas; his mother, Mildred Thompson, of Hot Springs, Arkansas; and six grandchildren.

Steven Moore, M.D.

Dr. Steven Moore of Jonesboro, passed away in Houston, Texas on Monday, December 21, 1999. Dr. Moore was 43.

Bruce B. Brown, Jr., M.D.

Dr. Bruce Brown of Springdale, passed away on Saturday, January 16, 1999. He was 36. Dr. Brown is survived by Kicia Magby Brown; and a daughter, Brittany Brown.

Gordon Page Oates, M.D.

Dr. Gordon Oates of Little Rock, passed away Sunday, January 17, 1999. Dr. Oates is survived by his wife Willie Oates; son, Randy Oates; daughter, Debbie Erwin, four grandchildren; and three great-grandchildren.

Things To Come

March 19 - 21, 1999

Clinical Infectious Disease '99: A Management Review for the Practicing Physician. The Waldorf-Astoria Hotel, New York, New York. Sponsored by the Center for Bio-Medical Communication, Inc. For more information, call 201-342-5300 or E-mail: cmeinfo@cbcbiomed.com.

March 29 - April 1, 1999

11th Annual National Managed Health Care Congress. Georgia World Congress Center, Atlanta, Georgia. For more information, call 888-882-2500.

April 23 - 24, 1999

Oncology in the New Millennium. The Ritz-Carlton Hotel, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

April 23 - 30, 1999

58th Annual American Occupational Health Conference. Ernest N. Morial Convention Center, New Orleans, Louisiana. Sponsored by the American College of Occupational and Environmental Medicine. For more information, call 847-228-6850 extension 180; FAX: 847-228-1856; Internet: <http://www.acoem.org>

May 1 - 6, 1999

American Society of Colon and Rectal Surgeons Annual Meeting/Celebrating the Society's 100 Year Anniversary. Washington, D.C. For more information, call 847-290-9184; FAX: 847-290-9203; Website: <http://www.fascrs.org/>.

May 19 - 21, 1999

Peripheral Artery Disease: Contemporary Strategies for Diagnosis and Therapy. Heart House Learning Center, Bethesda, Maryland. Sponsored by the American College of Cardiology. For more information, call 800-253-4636 ext. 652 or FAX: 301-897-9745

June 7 - 9, 1999

Approach to Advanced Heart Failure: Medical and Surgical Options. Heart House Learning Center, Bethesda, Maryland. Sponsored by the American College of Cardiology. For more information, call 800-253-4636 ext. 652 or FAX: 301-897-9745

June 11-13, 1999

The Annual College of Medicine Alumni Weekend. Hosted by the Arkansas Caduceus Club honoring the classes of 1934, 1939, 1944 M & D, 1949, 1954, 1959, 1964, 1969, 1974, 1979, 1984 and 1989. For more information call 501-686-6684.

SPECIALTY MEETINGS

**Park Hilton
Hot Springs, Arkansas**

**Saturday, May 1, 1999
11:30 a.m.**

Arkansas Academy of Family Physicians

Arkansas Pathology Society

Arkansas Society of Plastic and
Reconstructive Surgeons

Arkansas Chapter, American Medical Directors Association (AMDA)

Keeping Up

Recurring Education Programs

The following organizations are accredited by the Arkansas Medical Society to sponsor continuing medical education for physicians. The organizations named designate these continuing medical education activities for the credit hours specified in Category 1 of the Physician's Recognition Award of the American Medical Association.

FAYETTEVILLE

VA MEDICAL CENTER

Medical Grand Rounds/General Medical Topics, Thursdays, 12:00 p.m., Auditorium, Bldg. 3

WASHINGTON REGIONAL MEDICAL CENTER

Chest Conference, 1st Wednesday of every month, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided

Grand Rounds Conference, 3rd Wednesday of every month, 7:30 - 8:30 a.m., Baker Conference Center, breakfast provided.

Primary Care Conferences, every Monday, 12:15 - 1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided

Tumor Conference, every Thursday, 7:30 - 8:30 a.m., WRMC, Baker Conference Center, no fee, breakfast provided

HARRISON

NORTH ARKANSAS MEDICAL CENTER

Cancer Conference, October 22, November 3, and December 22, 12:00 p.m., Conference Room

HOT SPRINGS

ST. JOSEPH'S REGIONAL HEALTH CENTER

Cancer Conference, every Monday, 12:15 p.m., St. Joseph's Mercy Room

Chest Conference, Quarterly on last Tuesday of month beginning November 24, 12:15 p.m., St. Joseph's Mercy Room.

Medicine Not So Grand Rounds, Second Tuesday each month, 12:15 p.m., St. Joseph's Mercy Room. Lunch provided.

LITTLE ROCK

ST. VINCENT INFIRMARY MEDICAL CENTER

Cancer Conferences, Thursdays, 12:00 p.m., Southwestern Bell/Arkla room. Lunch provided.

General Surgery Grand Rounds, 1st Thursday, 7:00 a.m. Southwestern Bell/Arkla Room. Light breakfast provided.

Interdisciplinary AIDS Conference, 2nd Friday, 12:00 p.m., Southwestern Bell/Arkla Room. Lunch provided.

Journal Club, Tuesdays, 12:00 p.m., Southwestern Bell/Arkla Room. Lunch provided.

Pulmonary Conference, 4th Wednesday, 12:00 p.m., Southwestern Bell/Arkla Room. Lunch provided.

BAPTIST MEDICAL CENTER

Breast Conference, 3rd Thursday, 7:00 a.m., J.A. Gilbreath Conference Center

Gastroenterology/Surgery Journal Club, dates vary, AR Gastroenterology Memorial Medical Plaza, Suite 3A. Call 501- 202-2673 or 202-3888 for more information.

Grand Rounds Conference, Wednesdays, 12:00 p.m., Shuffield Auditorium. Lunch provided.

Pulmonary Conference, Tuesdays, 12:00 p.m., Shuffield Auditorium. Lunch provided.

Sleep Disorders Case Conference, dates vary, 12:00 p.m.. Call 202-2673 for date and location. Lunch provided.

MOUNTAIN HOME

BAXTER COUNTY REGIONAL HOSPITAL

Lecture Series, 3rd Tuesday, 6:30 p.m., Education Building

Tumor Conference, Tuesdays, 12:00 p.m., Carti Boardroom

The University of Arkansas College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor the following continuing medical education activities for physicians. The Office of Continuing Medical Education designates that these activities meet the criteria for credit hours in category 1 toward the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

LITTLE ROCK

ARKANSAS CHILDREN'S HOSPITAL

Faculty Resident Seminar, 3rd Thursday, 12:00 p.m., Sturgis Auditorium

Genetics Conference, Wednesdays, 1:30 p.m., Conference Room, Springer Building

Infectious Disease Conference, 2nd Wednesday, 12:00 p.m., 2nd Floor Classroom

Pediatric Grand Rounds, Tuesdays, 8:00 a.m., Sturgis Bldg., Auditorium

Pediatric Neuroscience Conference, 1st Thursday, 8:00 a.m., 2nd Floor Classroom

Pediatric Pharmacology Conference, 5th Wednesday, 12:00 p.m., 2nd Floor Classroom

Pediatric Research Conference, 1st Thursday, 12:00 p.m., 2nd Floor Classroom

UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES
ACRC Multi-Disciplinary Cancer Conference (Tumor Board), Wednesdays, 12:00 p.m., ACRC 2nd floor Conference Room.

Anesthesia Grand Rounds/M&M Conference, Tuesdays, 6:00 a.m., UAMS Education III Bldg., Room 0219

Autopsy Pathology Conference, Wednesdays, 8:30 a.m., VAMC-LR Autopsy Room

Cardiology-Cardiovascular & Thoracic Surgery Conference, Wednesdays, 11:45 a.m., UAMS, Shorey Bldg., room 3S/06

Cardiology Grand Rounds, 2nd & 4th Mondays, 4:00 p.m., UAMS Shorey Bldg., 3S/06

Cardiology Morning Report, every morning, 7:30 a.m., UAMS, Shorey Bldg. room 3S/07

Cardiothoracic Surgery M&M Conference, 2nd Saturday each month, 8:00 a.m., UAMS, Shorey Bldg. room 2S/08

CARTI/ Searcy Tumor Board Conference, 2nd Wednesday, 12:30 p.m., CARTI Searcy, 405 Rodgers Drive, Searcy.

Centers for Mental Healthcare Research Conference, 1st & 3rd Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research

CORE Research Conference, 2nd & 4th Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research

Endocrinology Grand Rounds, Fridays, 12:00 p.m., ACRC Bldg., Sam Walton Auditorium, 10th floor

Gastroenterology Grand Rounds, Thursdays, 4:00 p.m., UAMS Hospital, room 3D29 (1st Thurs. at ACH)

Gastroenterology Pathology Conference, 4:00 p.m., 1st Tuesday each month, UAMS Hospital

GI/Radiology Conference, Tuesdays, 8:00 a.m., UAMS Hospital, room 3D29

In-Vitro Fertilization Case Conference, 2nd & 4th Wednesdays each month, 11:00 a.m., Freeway Medical Tower, Suite 502 Conf. Rm

Medical/Surgical Chest Conference, each Monday, 4:00 p.m., UAMS Hospital, room M1/293

Medicine Grand Rounds, Thursdays, 12:00 p.m., UAMS Education II Bldg., room 0131

Medicine Research Conference, one Wednesday each month, 4:30 p.m. UAMS Education II Bldg. room 0131A

Neuropathology Conference, 2nd Wednesday each month, 4:00 p.m., ARState Crime Lab, Medical Examiner's Office

Neurosurgery, Neuroradiology & Neuropathology Case Presentations, Thursdays, 4:00 p.m., UAMS Hospital

OB/GYN Fetal Boards, 2nd Fridays, 8:00 a.m., ACH Sturgis Bldg.

OB/GYN Grand Rounds, Wednesdays, 7:45 a.m., UAMS Education II Bldg., room 0141A

Ophthalmology Problem Case Conference, Thursdays, 4:00 p.m., UAMS Jones Eye Institute, 2 credit hours

Orthopaedic Basic Science Conference, Tuesdays, 7:30 a.m., UAMS Education II Bldg., room B/107

Orthopaedic Bibliography Conference, Tuesdays, Jan. - Oct., 7:30 a.m., UAMS Education II Bldg.

Orthopaedic Fracture Conference, Tuesdays, 9:00 a.m., UAMS Education II Bldg., room B/107

Orthopaedic Grand Rounds, Tuesdays, 10:00 a.m., UAMS Education II Bldg., room B/107

Otolaryngology Grand Rounds, 2nd Saturday each month, 9:00 a.m., UAMS Biomedical Research Bldg., room 205

Otolaryngology M&M Conference, each Monday, 5:30 p.m., UAMS Otolaryngology Conf. Room

Perinatal Care Grand Rounds, every Tuesday, 12:15 p.m., BMC, 2nd floor Conf. Room

Psychiatry Grand Rounds, Fridays, 11:00 a.m., UAMS Child Study Center Auditorium

Surgery Grand Rounds, Tuesdays, 8:00 a.m., ACRC Betsy Blass Conf.

Surgery Morbidity & Mortality Conference, Tuesdays, 7:00 a.m., ACRC Betsy Blass conference room, 2nd floor

NLRVA Geriatric/Medicine Grand Rounds, Thursdays, 8:00 a.m., VAMC-NLR, Bldg 68, room 130

VA Medical Service Clinical Case Conference, Fridays, 12:00 p.m., VAMC-LR, room 2D109

VA Pathology-Hematology/Oncology-Radiology Patient Problem Conference, Thursdays, 8:15 a.m., VAMC-LR, room 2E142

VA Psychiatry Difficult Case Conference, 4th Monday, 12:00 p.m., VAMC-NLR, Mental Health Clinic

VA Lung Cancer Conference, Thursdays, 3:00 p.m., VAMC-LR, room 2E142

VA Medical Service Teaching Conference, Thursdays, 8:00 a.m., VAMC-NLR, Bldg. 68 room 130

VA Medicine-Pathology Conference, Tuesday, 2:00 p.m., VAMC-LR, room 2D109

VA Medicine Resident's Clinical Case Conference, Fridays, 12:00 p.m., VAMC-LR, room 2D08

VA Physical Medicine & Rehab Grand Rounds, 4th Friday, 11:30 a.m., VAMC-NLR Bldg. 68, room 118 or Baptist Rehab Institute

VA Surgery Grand Rounds, Thursdays, 12:45 p.m., VAMC-LR, room 2D109, 1.25 credit hours

VA Topics in Rehabilitation Medicine Conference, 2nd, 3rd, & 4th Thursdays, 8:00 a.m., VAMC-NLR Bldg. 68, room 118

VA Weekly Cancer Conference, Monday, 3:00 p.m., VAMC-LR, room 2E-142

White County Memorial Hospital Medical Staff Program, once monthly, dates & times vary, White County Memorial Hospital, Searcy

EL DORADO-AHEC

Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., Warner Brown Campus, 6th fl. Conf. Rm.

Behavioral Sciences Conference, 1st & 4th Friday, 12:15 p.m., AHEC

Chest Conference, 3rd Wednesday, 12:15 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.

Dermatology Conference, 1st Tuesdays and 1st Thursdays, AHEC

GYN Conference, 2nd Friday, 12:15 p.m., AHEC

Internal Medicine Conference, 1st, 2nd & 4th Wednesday, 12:15 p.m., AHEC

Noon Lecture Series, 2nd & 4th Thursday, 12:00 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.

Obstetrics-Gynecology Conference, 4th Thursday, 12:15 p.m. AHEC

Pathology Conference, 2nd Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5. Lunch provided.

Pediatric Conference, 3rd Friday, 12:15 p.m., AHEC

Pediatric Case Presentation, 3rd Tuesday, 3rd Friday, AHEC

Surgical Conference, 1st, 2nd & 3rd Monday, 12:15 p.m., AHEC

Tumor Clinic, 4th Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5, Lunch provided.

VA Hematology/Oncology Conference, Thursdays, 8:15 a.m., VAMC-LR Pathology conference room 2E142

FAYETTEVILLE-AHEC NORTHWEST

AHEC Teaching Conferences, Tuesdays & Wednesdays, 12:00 p.m., AHEC Classroom

AHEC Teaching Conferences, Fridays, 12:00 p.m., AHEC Classroom

AHEC Teaching Conferences, Thursdays, 7:30 a.m., AHEC Classroom

Medical/Surgical Conference Series, 4th Tuesday, 12:30, Bates Medical Center, Bentonville

FORT SMITH-AHEC

Grand Rounds, 12:00 p.m., first Wednesday of each month, Sparks Regional Medical Center

Neuroradiology Conference, 1st Tuesday of each month, 12:00 p.m., Sparks Regional Medical Center, 7th floor dining room

Neuroscience & Spine Conference, 3rd Wednesday each month, 12:00 p.m., St. Edward Mercy Medical Center

Tumor Conference, Mondays, 12:00 p.m., St. Edward Mercy Medical Center

Tumor Conference, Wednesdays, 12:00 p.m., Sparks Regional Medical Center

JONESBORO-AHEC NORTHEAST

AHEC Lecture Series, 1st & 3rd Tuesday, 12:00 p.m., Stroud Hall, St. Bernard's Regional Medical Center. Lunch provided.

Arkansas Methodist Hospital CME Conference, 7:30 a.m., Hospital Cafeteria, Arkansas Methodist Hospital, Paragould

Chest Conference, 2nd Tuesday, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch provided.

Citywide Cardiology Conference, 3rd Thursday, 7:30 p.m., Jonesboro Holiday Inn

Clinical Faculty Conference, 5th Tuesday, St. Bernard's Regional Medical Center, Dietary Conference Room, lunch provided

Craighead/Poinsett Medical Society, 1st Tuesday, 7:00 p.m. Jonesboro Country Club

Greenleaf Hospital CME Conference, monthly, 12:00 p.m., Greenleaf Hospital Conference Room. Lunch provided.

Independence County Medical Society, 2nd Tuesday, 6:30 p.m., Batesville Country Club, Batesville

Interesting Case Conference, 4th Tuesday, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch provided.

Jackson County Medical Society, 3rd Thursday, 7:00 p.m., Newport Country Club, Newport

Kennett CME Conference, 3rd Monday, 12:00 p.m., Twin Rivers Hospital Cafeteria, Kennett, MO

Methodist Hospital of Jonesboro Cardiology Conference, every other month, 7:00 p.m., alternating between Methodist Hospital Conference Room and St. Bernard's, Stroud Hall. Meal provided.

Methodist Hospital of Jonesboro CME Conference, 2nd Tuesday, 7:00 p.m., Cafeteria, Methodist Hospital of Jonesboro

Neuroscience Conference, 3rd Monday, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch Provided.

Orthopedic Case Conferences, every other month beginning in January, 7:30 a.m., NE Arkansas Rehabilitation Hospital

Perinatal Conference, 2nd Wednesday, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch provided.

Piggott CME Conference, 3rd Thursday, 6:00 p.m., Piggott Hospital. Meal provided.

Pocahontas CME Conference, 3rd Wednesday, 12:00 p.m. & 7:30 p.m., Randolph County Medical Center Boardroom

Tumor Conference, Thursdays, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch provided.

Walnut Ridge CME Conference, 3rd & last Tuesday, 12:00 p.m., Lawrence Memorial Hospital Cafeteria

White River CME Conference, 3rd Thursday, 12:00 p.m., White River Medical Center Hospital Boardroom

PINE BLUFF-AHEC

Behavioral Science Conference, 1st & 3rd Thursday, 12:00 p.m., Jefferson Regional Medical Center

Chest Conference, 2nd & 4th Friday, 12:00 p.m., Jefferson Regional Medical Center

FP Journal Club, 2nd Monday, 12:00 p.m., Jefferson Regional Medical Center

Internal Medicine Conference, 2nd & 4th Thursdays, 12:00 p.m., Jefferson Regional Medical Center

Obstetrics/Gynecology Conference, 2nd Tuesday, 12:00 p.m., Jefferson Regional Medical Center

Orthopedic Case Conference, 2nd & 4th Wednesdays, 12:00 p.m., Jefferson Regional Medical Center.

Pediatric Conference, 3rd Wednesday, 12:00 p.m., Jefferson Regional Medical Center

Radiology Conference, 3rd Tuesday, 12:00 p.m., Jefferson Regional Medical Center

Southeast Arkansas Medical Lecture Series, 4th Tuesday, 6:30 p.m., Locations vary. Dinner meeting.

Tumor Conference, 1st Wednesday & 3rd Friday, 12:00 p.m., Jefferson Regional Medical Center

TEXARKANA-AHEC SOUTHWEST

Chest Conference, every other 3rd Tuesday/quarterly, 12:00 p.m., St. Michael Health Care Center

Neuro-Radiology Conference, 1st Thursday every month at St. Michael Health Care Center and 3rd Thursday of every month at Wadley Regional Medical Center, 12:00 p.m..

Residency Noon Conference, Monday, Wednesday, Thursday, Friday each week, alternates between St. Michael Health Care Center & Wadley Regional Medical Center

Tumor Board, Fridays, except 5th Friday, 12:00 p.m., Wadley Regional Medical Center & St. Michael Hospital

Tumor Conference, every 5th Friday, 12:00 p.m. alternates between Wadley Regional Medical Center & St. Michael Hospital

We want to say thank you...

on behalf of the patients you serve through the Arkansas Health Care Access Foundation.



Arkansas Health Care Access Foundation Staff and Board of Directors

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If you would be interested in volunteering, please call the Foundation at 1-800-950-8233.

Arkansas Health Care Access Foundation, Inc.

PO Box 56248

Little Rock, AR 72215

(501) 221-3033

Continuing Medical Education Contacts:

The following is a list of telephone numbers physicians can call for more information on CME activities

EL DORADO

AHEC
870-862-2489

FAYETTEVILLE

AHEC
501-521-8260

VA Medical Center
501-444-5050

Washington Regional Medical Center
501-442-1823

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AHEC
501-785-2431

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North Arkansas Medical Center
870-365-2098

HOT SPRINGS

National Park Medical Center
501-620-1420

St. Joseph's Regional Health Center
501-622-1024

JONESBORO

AHEC
870-972-0063

LITTLE ROCK

Arkansas Children's Hospital
501-320-1248

Arkansas Medical Society
501-224-8967

Baptist Medical Center
501-202-2673

St. Vincent Infirmiry Medical Center
501-660-3592
or 501-660-3594

University of Arkansas for Medical Sciences
(UAMS)
501-661-7962

MOUNTAIN HOME

Baxter County Regional Hospital
870-424-1760

PINE BLUFF

AHEC
870-541-7611

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**APRIL 29 - MAY 1, 1999
HOT SPRINGS, ARKANSAS**

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MANUSCRIPT STYLE

Author information should include titles, degrees, and any hospital or university appointments of the author(s). All scientific manuscripts must include an abstract of not more than 100 words. The abstract is a factual summary of the work and precedes the article. Manuscripts should be typewritten, double-spaced, and have generous margins. Subheads are strongly encouraged. The original and one copy should be submitted. Pages should be numbered. Manuscripts are not returned; however, original photographs or drawings will be returned upon request after publication. Manuscripts should be no longer than ten typewritten pages. Exceptions will be made only under most unusual circumstances.

REFERENCES

References should be limited to ten; if more than ten are listed, the author(s) may designate the ten most significant to be printed and readers will be referred to the author(s) for the complete list. References must contain, in the order given: name of author(s), title of article, name of periodicals with volume, page, month and year. References should be numbered consecutively in the order in which they appear in the text. Authors are responsible for reference accuracy.

ILLUSTRATIONS

Illustrations should be professionally drawn and/or photographed. Glossy black and white photos are preferred. They should not be mounted and should have the name of the author(s) and figure number penciled lightly on the back. An arrow should indicate the top of the illustration. In photographs in which there is any possibility of personal identification, an acceptable legal release must accompany the material. Up to four illustrations will be accepted at no charge to the author(s). If more than four are necessary, it is understood that the author(s) will be responsible for the reproduction costs.

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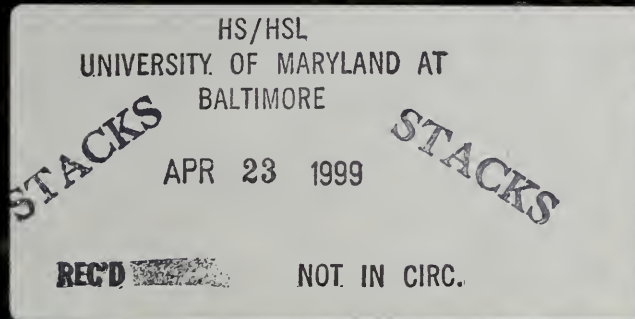
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Teenage Pregnancy

Vickie Henderson, M.D.*

Studies indicate that more than 500,000 teenagers give birth each year. Although this represents a decline in recent years, I find myself more troubled over teenage pregnancy. Contraception has never been more accessible. Education is prevalent. Yet, some teens actually plan to become pregnant.

I perceive a changing attitude toward teen pregnancy that alarms me. Certainly, one trend that has occurred is the increased likelihood that these mothers will stay single. While I do not advocate marriage due to an unplanned pregnancy, I have noticed that the father is often out of the picture by the time the 40-week gestation is complete.

It still surprises me to meet a 16-year-old new OB patient and find that their mother is excited over the pregnancy. The birth of a newborn baby should generate great anticipation, but usually there were some mixed emotions early in the pregnancy. Mothers of pregnant teenagers now seem more concerned about unsympathetic school personnel regarding frequent bathroom breaks and uncomfortable desks. I have had numerous requests from these mothers to place pregnant teens in the homebound program. This allows them to be privately tutored in the comfort of their own home.

Finally, there appears to be a cavalier attitude toward motherhood by the teenagers themselves. More mature mothers worry about being a good mother and providing a good home for their infant. I dare say, some young girls spend less time preparing for motherhood than they would getting a new puppy.

Let's not build special desks to accommodate expectant mothers in junior high and high school. Instead, let's emphasize the enormous responsibility that parenthood entails. Let's reconsider adoption. And, most importantly, let's emphasize abstinence.

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* Dr. Henderson is a specialist in Obstetrics and Gynecology. She practices at the Millard Henry Clinic in Russellville. Dr. Henderson is also a member of the editorial board for *The Journal of the Arkansas Medical Society*.

Medicine in the News

Arkansas Health Care Access Foundation

As of March 1, 1999, the Arkansas Health Care Access Foundation has provided free medical service to 15,155 medically indigent persons, received 28,522 applications and enrolled 55,022 persons. This program has 1,925 volunteer health care professionals including medical doctors, dentists, hospitals, home health agencies and pharmacists. These providers have rendered free treatment in 69 of the 75 counties.

For more information on this program, please call 800-950-8233 or 501-221-3033.

Wrap-up Session, Literature Review Included on Interactive ACAAI Annual Meeting CD-ROMs!

Newton, Mass. - For the fifth year, the American College of Allergy, Asthma & Immunology (ACAAI) has contracted SilverPlatter Education to produce their Annual Meeting on interactive CD-ROMs. A valuable tool benefiting all members of the ACAAI, the 1998 Annual Meeting on 4 CD-ROMs provides those, who attended the meeting with a review, of the material and those who were unable to attend with the original lectures and slides. The program has been produced with the assistance of an educational grant from Rhone-Poulenc Rorer Pharmaceuticals.

The Annual Meeting provides members with current information in the fields of allergy, asthma and immunology. Of particular interest at the 1998 meeting were the sessions that discussed changes in immunotherapy, including standardization and characterization of extracts and the debate of early use of immunotherapy and its effect in delaying the onset of asthma. Other highlighted sessions were reviews on pulmonology for the practicing allergist and symposia by allergists and ENTs on outcomes in rhinitis and sinusitis.

Fifty plenary sessions and selected symposia from the ACAAI Annual Meeting November 6-11, 1998 have been captured onto 4 interactive CD-ROMs. This reference tool covers 24 hours of the presenters' audio, 1,500 original slides, and the text of the original question and answer sessions that followed the presenters' lectures. The CD-ROM also includes the complete transcript from the Annual Meeting Literature Review.

"That's the Way it was in Philadelphia: The Wrap Up," a new program at the 1998 Annual Meeting, was held on the last day. Nine respected allergists summarized the highlights of the six-day meeting into a two-hour presentation. This exciting new session is also included

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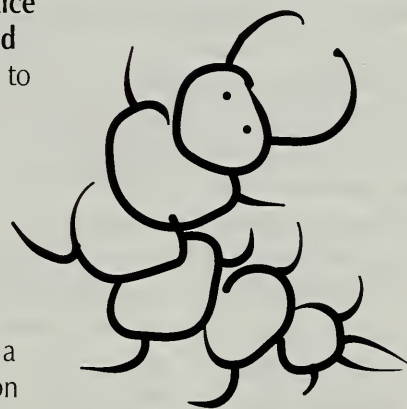
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SilverPlatter Education continues to offer the ACAAI 1998 4 CD-ROM set at its' original price from 5 years ago. The price is \$149 for individual users and \$349 for libraries and institutions. It is available on both Windows and Macintosh platforms. For more information please contact Leslie Gonzalez at (617) 244-0284, ext. 415

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RTOG Clinical Trial Finds Radiation, Chemotherapy Major Breakthrough in Treating Cervical Cancer

A national Radiation Therapy Oncology Group (RTOG) clinical study has concluded that adding two chemotherapy agents to radiation therapy significantly improves the survival rate of women treated for locally advanced cervical cancer.

Results of the clinical trial were published on the *New England Journal of Medicine* web site February 22 and were to appear in the *NEJM* in the next few months.

Study Chair, Mitchell Morris, M.D., professor of gynecologic oncology at the University of Texas M.D. Anderson Cancer Center, Houston, called the findings "a tremendous advance in the treatment of women with cervical cancer. The addition of chemotherapy to radiation will help thousands of women survive this cancer each year".

Walter J. Curran Jr., M.D., RTOG chairman, said "this exciting result confirms the importance of conducting large randomized studies. The RTOG believes this study will change the standard of care for women with cancer of the cervix." Dr. Curran is clinical director of the Kimmel Cancer Center, Thomas Jefferson University, Philadelphia and is professor and chair of the Department of Radiation Oncology at the Jefferson Medical College.

The seven-year study, involving more than 400 patients, compared treatment with radiation alone to radiation therapy combined with 5-fluorouracil and cisplatin, two chemotherapy agents. Patients were followed between 1990 and 1998. A total of 61 institutions participated in the clinical trial.

Estimated survival rates at five years were 73 percent for patients treated with chemoradiation and 58 percent for patients treated with radiation alone, according to Dr. Morris.

Disease-free survival rates were 66 percent for chemoradiation patients and 40 percent for patients receiving radiation alone, he added.

The incidence of the cervical cancer returning in the pelvic area and beyond was significantly higher for patients treated with radiation alone, the clinical trial found.

Both groups had comparable side effects. As predicted, increased numbers of women had lowered blood counts, which places patients at higher risk from infections, but this side effect was reversible, Dr. Morris explained.

For information on papers on other related clinical

trials, also posted on the *NEJM* web site February 22, call the National Cancer Institute Information Office at 301-496-6641.

RTOG is a federally funded cancer clinical trials group, which carries out multidisciplinary research nationwide. It is a clinical research component of the American College of Radiology. For more details about RTOG clinical trials, contact Nancy Smith at 215-574-3205.

Arkansas Department of Parks and Tourism Publishes Back Country Driving Trails Guide

One of the hottest trends in the marketplace, sports utility vehicles (SUVs) can be seen on any American highway. Surprisingly, research shows that most of the 10 million SUVs never leave paved roads.

"The problem is," according to Arkansas Tourism Director Joe David Rice, "the average SUV owner doesn't really know where to find back roads suitable for four-wheel drive experiences."

The Arkansas Department of Parks and Tourism's newly published "Arkansas Back Country Driving Trails Guide" is designed to solve that problem for Arkansans and visitors to the state, Rice said.

The four-color brochure contains maps detailing miles and miles of remote routes in the Ozark and Ouachita National Forests as well as information on recreation sites in both forests.

"Our objective is to create a new tourism product by encouraging SUV enthusiasts to get off the main roads of Arkansas and really see the countryside," Rice said. "We worked closely with the staffs of the national forests to identify back roads offering quality off-road destinations for owners of SUVs and other four-wheel drive vehicles."

"These routes provide views of rock formations, wildlife, and rugged landscapes that just aren't available from the state's paved roads," Rice added.

The brochure also contains tips for environmentally responsible off-road traveling. "The last thing we want is people destroying the natural beauty they have gone into the back country to see," Rice said.

The \$15,000 cost of printing 75,000 copies of the brochure was paid by Fiser Hummer of Alexander, Rice said. The Hummer, manufactured by AM General, is an off-road vehicle. "We really appreciate the assistance of Fiser Hummer," Rice said. "The public-private partnership will benefit all of Arkansas' tourism industry."

Copies of the guide may be obtained at any of the 14 Arkansas Tourist Information Centers located around the state, by phoning 1-800-NATURAL, visiting the department's web site at www.Arkansas.com, by e-mailing arkansas@info.com or by writing the department at One Capitol Mall, Little Rock AR 72201. The brochure is also available at Fiser Hummer on Ark. 5 in Alexander.

Submitted by the Arkansas Department of Parks & Tourism

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AMS Newsmakers

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White, Luther R.	Newport

Eastern Ozarks Chief Receives Impact Award

Dr. George Jackson, chief of staff at Eastern Ozarks Regional Health System in Cherokee Village, has received the 1998 Impact Award from Country Health Associates, parent company of the hospital.

The award was presented in appreciation for the "loyalty, commitment and leadership (Jackson) continually provides to Eastern Ozarks ... both publicly and professionally."

The award was presented at Country Health Associates' annual corporate meeting in Nashville, TN.

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Arkansas Women and Osteoporosis: Informed But Still at Risk

Lori Turner, Ph.D.*

Blake Perry, M.S.*

Inza Fort, Ed.D.*

Ro DiBrezzo, Ph.D.*

Introduction

Osteoporosis, also described as "fragile bone disease," is a serious health problem in the U. S. today. Fractures from osteoporosis are a major public health problem in the western world.¹ Osteoporosis is a crippling condition that often results in premature mortality and significant morbidity which may be manifested in the form of fractures, bone deformity, and chronic pain.² People with osteoporosis lose excessive amounts of bone mineral which results in bone fragility. In many osteoporotic patients, even a minor fall can result in fracture, often with devastating results.

Osteoporosis is one of the most prevalent diseases of aging, affecting more than 25 million people in the United States, 80 percent of whom are women.³ It is responsible for approximately 250,000 hip fractures a year and an annual total of 1.5 million fractures in the United States.⁴

In 1995, the economic cost of osteoporosis was estimated at \$13.8 billion, of which \$10.3 billion was for the treatment of White women.⁵ The population segment aged 80 years and over is experiencing the fastest growth in the United States. As the population ages, and medical costs escalate, future estimates are staggering. Considering the growth of this aging group, the annual number of hip fractures could triple by the year 2040. One conservative estimate states that the cost of hip fractures alone will escalate to approximately \$240 billion by the year 2040.⁶

The federal government has issued a formal document, stating the urgent need to: reduce deaths from falls, reduce incidences of hip fractures, and increase the number of women educated about osteoporosis.⁷ Older women are recognized as a high risk group for hip fracture. National health objectives include the need to reduce hip fracture among white women aged 65 years

and older to 2,177 per 100,000.⁷ Goals for osteoporosis counseling include increasing to at least 90% the proportion of women counseled about estrogen replacement therapy in the prevention of osteoporosis.⁷ Women who are knowledgeable and have appropriate attitudes are more likely to take preventive actions.

Purpose

The purpose of this study was to determine knowledge, attitudes, and dietary behaviors of middle aged and older female residents of northwest Arkansas regarding osteoporosis.

Methods

Subjects included women who were involved in a resistive exercise program at the University of Arkansas. At the beginning of the program, participants completed a 17-item survey with questions related to osteoporosis knowledge, attitudes, and behavior. The questionnaire was validated and had a reliability of .76.⁸ Data collection took place in November 1997. Data were analyzed using Statistical Analysis Software (SAS). Descriptive statistics were computed for all questions.

The Sample

Participants included 95 female residents of northwest Arkansas aged 35 to 65 years of age. Approximately 13 percent of the women were 35-39 years of age, 37% were 40-49 years, 40% were 50-59 years, and 10% were 60-65 years. Ninety-seven percent were White. This group was well educated: 27% had high school diplomas, 30% had earned bachelor degrees, 24% had completed master's degrees, and 13% had achieved doctorate degrees. Twenty-one percent were sedentary, 60% were moderately active and 19% were very active.

Results and Discussion

Subjects were knowledgeable regarding osteoporosis and calcium. Sixty two percent (62%) were aware that they need more calcium after menopause, 56% knew

* Lori Turner, Ph.D., R.D., Assistant Professor; Blake Perry, M.S.; Inza Fort, Ed.D., Professor of Kinesiology; Ro DiBrezzo, Ph.D., Professor of Kinesiology, from the Department of Health Science, Kinesiology, Recreation and Dance at the University of Arkansas in Fayetteville.

that being a White female put them at risk for the disease, 90% were aware that the greatest bone losses occur after menopause, 98% knew that regular exercise could reduce risk, and 92% were educated about the value of estrogen replacement therapy in reducing risk. Knowledge regarding food sources of calcium was not as positive, more than half (66%) selected macaroni and cheese as a good source of calcium. Only 17% of the women were aware of the recommended number of dairy servings. (Table 1 displays these findings.)

Table 1: Respondents Who Correctly Answered Knowledge and Attitude Items N=95		
Item	Correct responses	
Women need more calcium after menopause than in their thirties.	62%	
White women have a greater change of developing osteoporosis than Black women.	56%	
The greatest bone loss occurs after menopause.	90%	
Estrogen replacement therapy may help decrease the development of osteoporosis.	92%	
A lifetime of adequate calcium may help decrease osteoporosis risk.	92%	
Regular exercise may reduce osteoporosis risk.	98%	
Macaroni and cheese is a better course of calcium than peanut butter, bananas, or carrots.	66%	
An adult women should have at least 2 servings from the milk group.	17%	
Attitude Responses		Favorable Responses
I am concerned about my risk of developing osteoporosis.		88%
I have some influence over my own osteoporosis risk.		100%
I believe that I can change my diet to reduce osteoporosis risk.		98%

Most participants displayed protective attitudes. Eighty-eight percent (88%) were concerned about osteoporosis, 100% believed that they had some influence on their risk, and 98% believed that their diet could influence disease development (see Table 1).

Results regarding dietary behaviors were not as positive. Forty-five percent (45%) of the women reported that they did not consume milk, 23% avoided cheese, 72% did not eat ice cream or ice milk, and 48% did not consume yogurt. While improving knowledge and attitudes are important components of establishing preventive behaviors, a gap between these factors and behavior was observed. These women were involved in behaviors that increased osteoporosis risk.

National health objectives state that patients at risk for osteoporosis need to obtain osteoporosis counseling.⁷ Results from the present study indicate that physician counseling materials regarding osteoporosis need to include strategies for not only enhancing dietary knowledge, but also for facilitating behavior change. Existing counseling literature focuses on imparting knowledge about calcium and osteoporosis but fails to provide specific ways to change behaviors.^{9,10}

Through active intervention, health care professionals work together to reduce the devastating impact of osteoporosis. They can promote widespread patient and public education. They can develop and implement strategies that focus on behavior change in addition to providing education to patients.

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THE ACCURACY OF NON-BRONCHOSCOPIC BRONCHOALVEOLAR LAVAGE IN THE DIAGNOSIS OF PNEUMOCYSTIS CARINII PNEUMONIA IN CHILDREN

Michael Agyepong, M.D.*

Barry J. Evans, M.D.**

Jeremias L. Murillo, M.D.**

Introduction

Pneumocystis carinii is an opportunistic pathogen that frequently causes pneumonia in children with acquired immunodeficiency syndrome (AIDS). In adults, Pneumocystis carinii pneumonia (PCP) is usually diagnosed by fiberoptic or rigid bronchoscopic bronchoalveolar lavage (BAL) which provides a diagnostic yield of 90-97%.¹ Open lung biopsy, a more invasive procedure provides a yield of 97%.^{2,3} Recently, bedside non-bronchoscopic bronchoalveolar lavage (NBAL) has been proposed as a less invasive alternative for the diagnosis of PCP in children.⁴ This paper reviews the effectiveness of bedside NBAL in the diagnosis of PCP in HIV-infected children.

Design/Methods

A retrospective study was performed on eleven patients admitted from 1/31/91 to 10/13/93 to the pediatric intensive care unit of a tertiary care inner city hospital, ranging in age from 1.5 months to 17 years who underwent bedside non-bronchoscopic bronchoalveolar lavage based on a clinical diagnosis of PCP using specific criteria.^{5,6,7,8} The specific criteria used included a positive HIV serology; respiratory distress characterized by respiratory rate >60/minute, retractions or flaring; hypoxemia defined as oxygen saturation less than 90% in room air, arterial blood gas less than 65 mm Hg in room air or a-A gradient >20mm Hg; CD4 count <400/mm³ and CD4/CD8 ratio <1.0, serum lactate dehydrogenase >200IU/L; and an abnormal chest x-ray with interstitial infiltrates.

Patients were selected for the study if there was documentation in their charts of NBAL or BAL. The NBAL procedure was performed at the bedside by Dr. Evans using the method described below. The BAL procedure was performed by the staff otolaryngologist using rigid

bronchoscopy.

Non-bronchoscopic bronchoalveolar lavage was performed at the patient's bedside according to the method described by Koumbourlis and Kurland.⁹ The patient was first paralyzed using atropine, diazepam, fentanyl and suxamethonium as induction agents and then intubated. Tube placement above the carina was checked by auscultation and the patient was connected to a ventilator. A sterile 8 French feeding tube was attached to a stopcock with a syringe and connected to a wall suction by means of a specimen trap. The stopcock was initially closed to the suction unit. The catheter was then passed through the endotracheal tube into the trachea by means of an airway connector placed between the endotracheal tube and the ventilator. The catheter was advanced until resistance was met and then withdrawn by about 3 mm, and advanced again to the point of resistance. Three milliliters (ml.) of normal saline was then instilled into the catheter followed by the instillation of 2 ml. of air to ensure that the saline reached the trachea and bronchi. The stopcock was then opened to the suction unit and the instilled saline was removed from the tracheobronchial tree and collected into the trap. The suction was continued until the aspirate was minimal. The patient was then ventilated for 5 to 10 breaths. This process was repeated twice. The aspirate was then sent to the histology laboratory for pathological examination. Patients were under continuous cardiorespiratory and pulse oximetry monitoring during the procedure which usually lasted 5 minutes.

Results

Of the eleven patients who had bedside NBAL, eight patients had positive smears for *Pneumocystis* on the first attempt and two were positive on the second attempt. One patient had a negative aspirate for *Pneumocystis*. The yield for *Pneumocystis carinii* on NBAL was 91%. Two patients, both of whom survived, also had *Candida* in addition to *Pneumocystis carinii*. There were no complications associated with the procedure.

* Dr. Agyepong practices at the Malvern Pediatric Clinic

** Dr. Evans, Chief of Critical Care, and Dr. Murillo, Chief of Infectious Diseases, are with the Department of Pediatrics, Newark Beth Israel Medical Center/Childrens Hospital of NJ

Discussion

There is a large amount of data in the literature of the usefulness of bronchoscopic BAL in the evaluation of HIV-infected pediatric patients with pneumonia.^{10,11, 12,13} However, rigid bronchoscopic BAL requires the coordination of several complicated activities including the transportation of critically-ill patients from the pediatric intensive care unit to the operating room and the availability of an otolaryngologist. In the absence of the latter, a pulmonologist, proficient in fiberoptic bronchoscopy in children, could perform a bedside procedure. Such a specialist would add considerably to the cost of treatment in comparison to a simple NBAL. Moreover the NBAL procedure could be carried out at the time of the initial intubation by the intensivist and potentially limit the number of endotracheal interventions. In addition, there are specific risks associated with rigid bronchoscopy. In a series of 29 HIV infected children who underwent bronchoscopic BAL, serious complications occurred in two children.¹⁴ One child developed seizures after the procedure and another child had increasing respiratory distress after the procedure and died 30 hours later from respiratory failure. The other diagnostic option would be an open lung biopsy which carries an even higher complication rate which range between 6 to 12%.^{15, 16,17} The major sequelae following open lung biopsy is pneumothorax. The yield of 91 % for bedside NBAL compares favorably with the reported yield of 90-97% for BAL. Open lung biopsy which has a higher complication rate offers a yield of 97%. No complications were noted in our study. Non-bronchoscopic bronchoalveolar lavage appears to be just as effective as rigid bronchoscopic BAL and open lung biopsy in the diagnosis of PCP while having the advantage of being safer, faster and relatively inexpensive to perform. It may also save time, money and eliminate the need for an extra consultation when compared with flexible bronchoscopy. This study is limited because of the small number of patients. Compared to the other diagnostic procedures, NBAL appears to be a relatively more accessible option. Tu Bien and Detsky advocated empiric treatment of PCP without resorting to bronchoscopy for a confirmation of the diagnosis prior to treatment.¹⁸ This may not be necessary since the diagnosis of PCP can be quickly and safely confirmed at the bedside with NBAL. Patients who require intubation as part of their treatment could also undergo NBAL if they fit the clinical diagnostic criteria for PCP.

Conclusion

Non-bronchoscopic bronchoalveolar lavage is as effective as rigid bronchoscopic bronchoalveolar lavage in diagnosing *Pneumocystis carinii* pneumonia in children with HIV infection. Patients suspected with PCP who

have a negative NBAL on the first attempt should have a second NBAL before proceeding to bronchoscopic BAL or open lung biopsy. Also time, money and consultant costs can be saved by this procedure when compared to a bedside flexible bronchoscopy which may have about the same safety profile. The procedure of non-bronchoscopic bronchoalveolar lavage can be performed at the bedside and is safer, faster and less expensive than open lung biopsy or rigid bronchoscopic BAL.

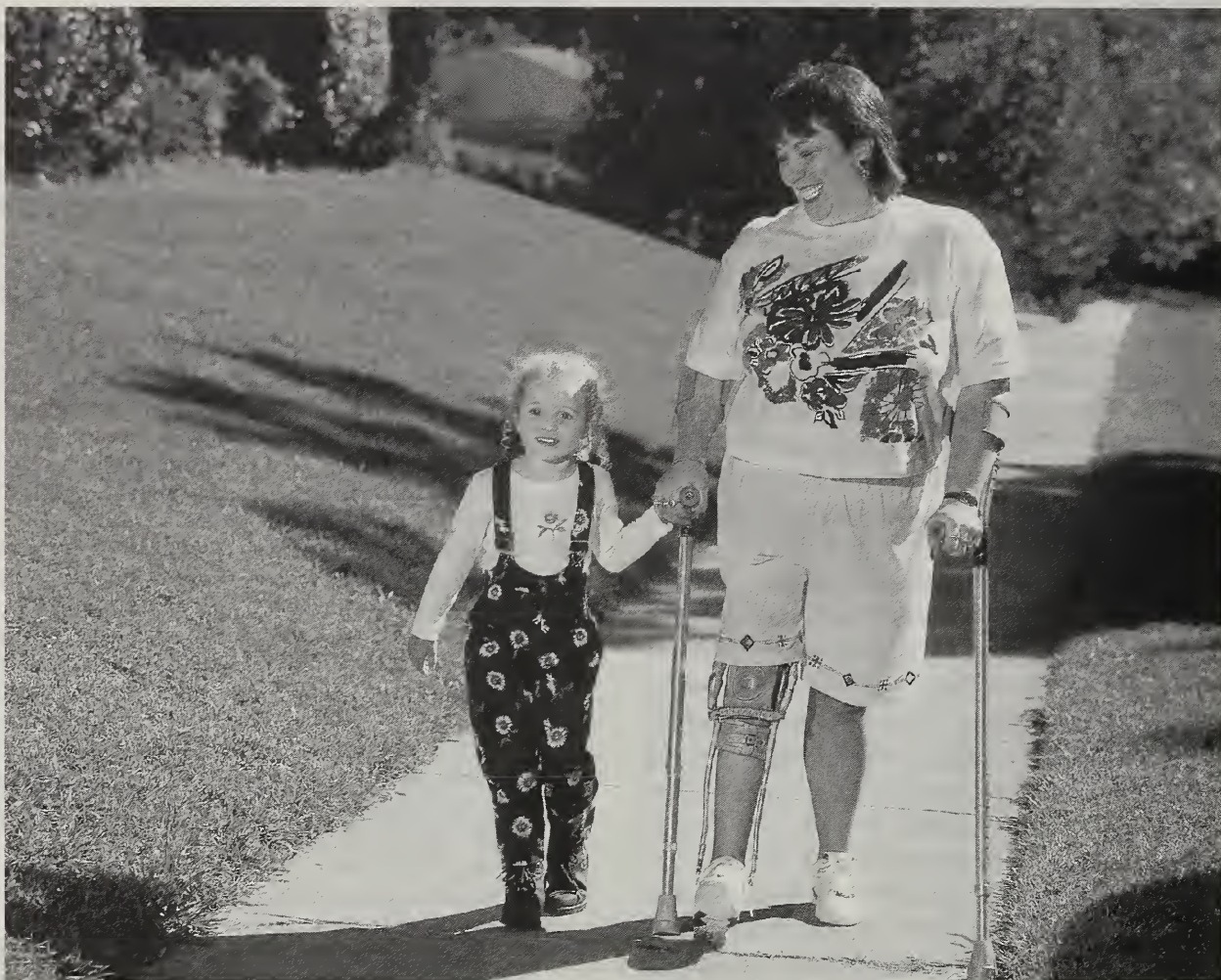
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Technology Limitation Not Recognized

J. Kelley Avery, M.D.*

Case Report

A 33-year-old woman made an appointment with her OB/GYN because of a lump in her right breast. She was seen by the physician's nurse practitioner who was not able to palpate the mass, but immediately referred the patient for a mammogram. The report stated that there were calcifications in the left breast and recommended comparison with previous studies. These studies were obtained by the radiologist who, after comparing the films with the current ones, concluded that there was no malignancy, but recommended follow-up with a repeat mammogram on the right breast in four to six months.

The patient called the radiologist for an appointment for the repeat mammogram four months after the first examination. The test was done five months after the initial examination and mammogram. Again the radiologist reported no evidence of malignancy. The patient was instructed to return to her physician's office for an examination in three months. It was five months before she returned.

Ten months after the identification of the mass by the patient, she saw her OB/GYN because the mass seemed to have increased in size. The physician, who had not seen the patient for this complaint until this visit, ordered an ultrasound examination which showed the mass to be solid. She was next seen by a surgeon, whose excisional biopsy showed a stage II infiltrating intraductal carcinoma. The treatment chosen was a modified radical mastectomy and axillary node dissection followed by chemotherapy.

A lawsuit was filed charging loss of chance for survival, loss of chance for lumpectomy, and delay necessitating chemotherapy. The demand was for \$3 million.

Loss Prevention Comments

This very serious case was managed in such a way as to insure a victory for the patient in the lawsuit. The very vital part of the evaluation of this patient's presenting complaint was done by a nurse practitioner who could not feel the mass, and without the input of the supervising physician. The referral of the patient for mammogram may have been done under existing protocol, but if so, the danger of such a protocol is illustrated by this case. The final responsibility for management of a patient rests with the physician and not the nurse practitioner unless there is a violation of the existing protocol by the licensed employee. This was not the case here. The doctor-patient relationship is a very personal one, and cannot be delegated to assisting personnel. Both case law and medical ethics hold this to be true.

The responsibility of the radiologist in this case is not apparent. There may have been no way for her to tell that the referring physician was not personally involved in the management of this patient. If the radiologist had known that this woman's doctor had not seen the patient and tried to confirm the presence of the mass, she probably would have made contact directly with the attending physician. We have to assume that the radiologist handled the requests for examinations thinking that the attending physician was directly involved in the management decisions for his patient.

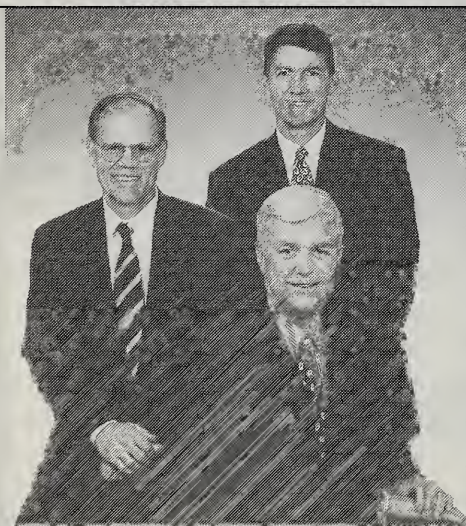
We know of no technology used in the practice of medicine that is infallible! The failure rate may be very low, but there is a failure rate. Mammograms are no exception! When a patient reports the presence of a lump in her breast, we had better act as if that were a fact, whether or not we can confirm it by our physical examination. Certainly after the follow-up mammogram, even in the presence of a negative report, the physician should have again tried to confirm the presence of a mass by physical examination and any other test that might have been helpful.

* Dr. Avery is Chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Co., Brentwood, TN. This article appeared in the *Journal of the Tennessee Medical Association* in February 1998. It is reprinted here with permission.

The overriding necessity in such a case as this is a *definitive diagnosis!* With the first encounter and the negative mammogram report, it would have been expected that the physician involve himself in the decision-making and carefully examine the breast, order additional studies, and at that point educate his patient about the seriousness of her finding. The physician might have been able to palpate the mass. Certainly he would have been able to order additional studies as he did ten months later. The technology available to us, while not perfect, is complimentary to the search for that definite diagnosis. Perhaps the most important aspect of physician involvement is the ability to gain more patient cooperation in this search.

A very high jury award in this case indicated that they believed that the lack of physician involvement in the management of his patient and the absolute reliance on the mammogram in spite of a known failure rate for that examination proved the negligence of the physician.

Good lessons are: (1) You should closely supervise the work of mid-level practitioners by well-written protocols and personal involvement in decision-making with respect to your patients, (2) The patient who says she has a lump in her breast should be managed as if you knew she did, whether or not you can feel it, and (3) You should pull out all the stops to get an early tissue diagnosis.



*Clockwise (L-R):
Jim Strawn, Stephen Chaffin, Bill Smith*

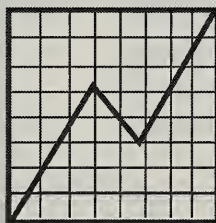
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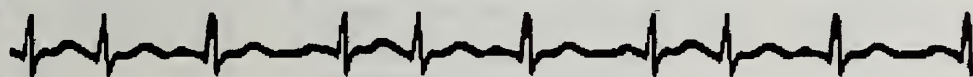
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Hill's Sign: A Non-Invasive Clue of the Severity of Chronic Aortic Regurgitation

Many physical signs are associated with chronic aortic regurgitation (AR, Figure 1).¹ With technology advancement, these classic signs are seldom recognized (Table 1). We recently cared for a patient with congestive heart failure due to chronic severe AR, and review the significance of Hill's sign, a non-invasive marker that suggests the degree of severity of AR.

Patient Presentation

History. A 57 year-old male presented to an out-lying institution with congestive heart failure which symptomatically responded to the use of intravenous furosemide (see Complete Problem List, Table 2). He was transferred for further diagnosis and treatment.

He had no history of prior myocardial infarction or valvular heart disease. He was a retired plumber who smoked one pack of cigarettes daily. With the development of progressive shortness of air, he quit drinking his daily consumption of one pint of whiskey. There was no history of illicit drug use.

Physical and laboratory examination. With the patient supine, the blood pressure in the right arm was 148/66 mmHg., and in the right leg it was 202/70 mmHg. There were scattered crackles in both lung bases. A grade 2/6 ejection systolic murmur was heard at the base and a grade 2-3/6 diastolic murmur was auscultated at the left third intercostal space. There was 1+ pre-tibial edema. The electrocardiogram showed left ventricular hypertrophy.

Hospital course. Symptoms of congestive heart failure dramatically improved with pre-load and after-load reduction. Cardiac catheterization showed no significant epicardial coronary artery disease, normal left ventricu-

Eponyms Associated with Aortic Insufficiency

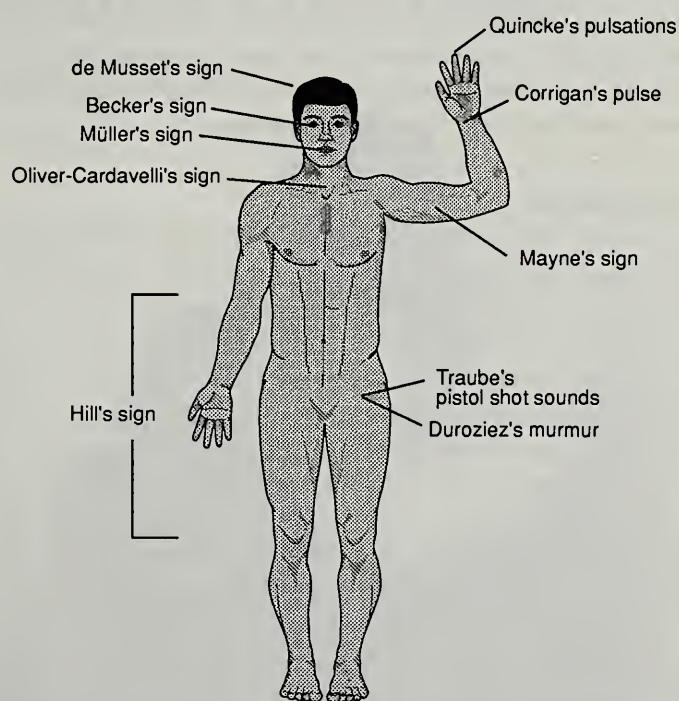


Figure 1: Signs of aortic regurgitation detected by observation, palpation, or auscultation.

* Drs. Kishan and Talley are from the Department of Internal Medicine and the Division of Cardiology, UAMS Medical Center and the John L. McClellan Memorial Veterans Hospital.

Table 1	Signs of Aortic Regurgitation
Sign	Description
Becker's sign	Pulsation of the retinal arteries
Corrigan's pulse	Rapid up and down stroke of the carotid pulse
de Musset's sign	Anterior-posterior head bobbing
Duroziez murmur	Double femoral artery murmur with femoral artery compression
Hill's sign	Brachial - popliteal gradient (see text)
Landolfi's sign	Systolic constriction and diastolic dilation of the pupil
Lighthouse sign	Alternate blanching and flushing of the forehead and face
Mayne's sign	Decrease in diastolic blood pressure with arm elevation
Müller's sign	Pulsations of the uvulae
Oliver-Cardavelli's sign	Pulsations of the larynx
Quincke's pulsations	Rhythmic pulsations of the nail bed vessels
Traube's pistol shot sounds	Double femoral artery "snap" with light femoral artery compression
Water hammer pulse	Rapid up and down stroke pulse in arteries of upper limb

lar end-diastolic pressure (11 mmHg., normal < 12 mmHg.) and a mild global reduction in left ventricular systolic function (ejection fraction 50%, normal \geq 60%). An echocardiogram showed tricuspid aortic valve, dilated aortic root (4.1 cm., normal 2.0-3.7 cm.) severe AR, concentric left ventricular hypertrophy and mildly decreased left ventricular systolic function. He is being considered for aortic valve replacement.

Discussion

In 1909, Hill found "marked difference" in the systolic blood pressure of a patient with AR in the arm compared to that in the leg.² In his subsequent study in 1911, Hill and Rowland abolished the gradient by warming the lower extremity using hot water bath. They concluded that the gradient was due to conductance of the systolic wave and it was abolished by vasodilatation.³ Frank and colleagues compared the popliteal-brachial systolic gradient with the degree of angiographic AR. A systolic pressure gradient of 20 mmHg. or less was normal, a 20 - 60 mmHg. gradient correlated to 2⁺ - 3⁺ AR and > 60 mmHg. was associated to 4⁺ AR. In this series, a gradient of > 20 mmHg. was detected in 25 of 26 patients with moderate or severe AR. In 1⁺ AR, the gradient did not differ from normal controls.

Hill's sign can be misleading in certain situations. It can be falsely positive in patients with high stroke

Table 2.	Complete Problem List
1. Valvular Heart Disease	
Etiology	Systemic arterial hypertension Aorto-annular ectasia
Anatomy	A. Cardiac catheterization \rightarrow < 20% stenoses of the coronary arteries B. Echocardiogram \rightarrow tricuspid aortic valve, dilated aortic root, concentric left ventricular hypertrophy and dilated LA
Physiology	A. Congestive heart failure B. Cardiac catheterization \rightarrow 4 ⁺ aortic regurgitation C. Echocardiogram \rightarrow Severe aortic regurgitation and mildly decreased LV systolic function
Objective	Moderately compromised
Subjective	Moderately compromised
2. Substance use \rightarrow	
a. cigarettes	
b. ethanol	

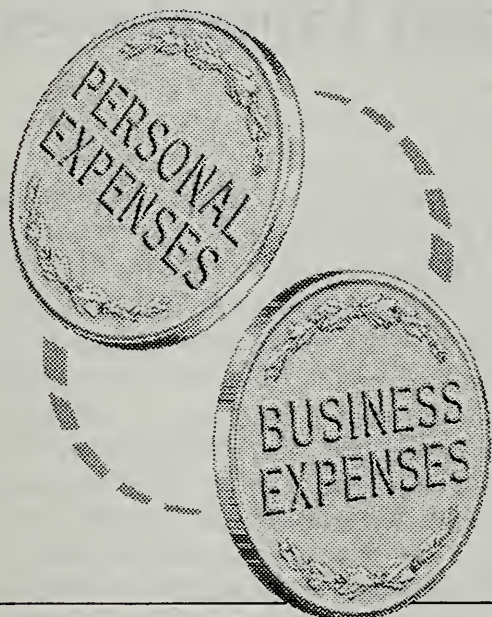
volume including hyperthyroidism, arterio-venous fistula and vigorous exercise. It can be false negative in patients with co-existent aortic stenosis, coarctation of aorta and with peripheral vascular disease.⁵ A further limitation is that the lower extremity blood pressure measurement is by indirect method. In a study by Kutryk and Fitchett these inconsistencies were demonstrated with direct intra-arterial measurement.⁶ However in this study there were only five patients.

In conclusion, Hill's sign has high sensitivity for moderate and severe AR. Further studies are needed to correlate indirect blood pressure measurement in lower extremity with intra-arterial recordings.

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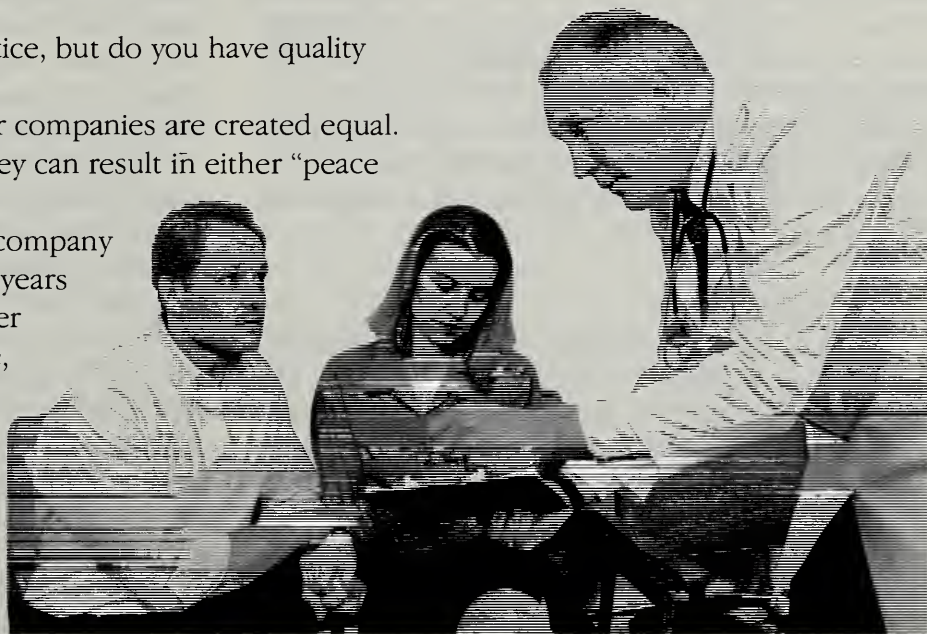
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State Health Watch

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What's New in the Public Health Laboratories?

The Public Health Laboratories (PHL) of the Arkansas Department of Health is one of the busiest laboratories in the state. Last year more than 800,000 medical and environmental tests were performed. The mission of the PHL is to support public health programs by providing analytical services, education, and technical assistance in selected specialties of laboratory science. A staff of 124 is employed to accomplish this mission. In addition, some testing is performed for hospitals, clinics and private physicians. The PHL performs only those tests that have implications for public health. Some tests are outsourced, even if needed by a public health program, when it is more advantageous to do so.

Keeping step with developing laboratory technology is necessary, but difficult. Laboratories that use old-fashioned methods and techniques have a hard time competing because older methods are usually labor intensive, increasing the cost of services. An even greater hindrance is longer turnaround times that delay diagnosis and treatment. The PHL has been successful with updating some laboratories and less successful in others. Some are state-of-the-art while some use 50-year-old methodology. The following is a brief discussion of "What's New" in some of the laboratories testing medical specimens.

The TB Laboratory

The TB laboratory uses state-of-the-art methodologies to analyze 10,000 to 12,000 samples per year. The most significant change in testing samples for TB is the use of amplification methodology. The PHL began using the amplification method about two years ago and has now reported about 250 patient results. A reliable result, positive or negative for TB, can be obtained in about 3 hours of analytical time. Isolation and treatment decisions can be based on the results of this reliable test. Shortening turnaround time has been the driving force for change in TB laboratories since some patients died with multidrug resistant TB before it could

be diagnosed. The Centers for Disease Control and Prevention has published guidelines for TB laboratories emphasizing methods which give rapid turnaround times. The TB laboratory reports results of acid fast smears within 24 hours. Samples are cultured in liquid media and on solid media. As some specimens fail to grow in one or the other of the systems, both liquid and solid cultures are needed. The TB laboratory has 7 continuous-monitoring instruments for liquid cultures and continues to use Lowenstein-Jensen solid medium, the culture system that has been used for decades. Sufficient growth for identification usually occurs between 7 to 14 days in liquid culture and between 14 to 21 days on solid culture. Identification is made with either specific DNA probes or by fatty acid analysis by high performance liquid chromatography. The cost of the result with the latter method is about one-tenth that of the DNA probe. Drug susceptibility testing (four antibiotics) is performed using liquid media backed up by conventional solid media testing in case resistance is seen. Results are usually obtained within 7 to 10 days using the rapid liquid media. The conventional method takes 21 days for susceptibility results. This entire process usually takes about 28 days for cultures containing TB.

For the past 4 years the TB program has been successful in obtaining funds from CDC which have helped upgrade the PHL. In addition to the new methodology mentioned above, the TB laboratory has new microscopes, upgraded safety hoods, safety centrifuges, cytopins (concentrates material for a better AFB smear), and several other improvements. These upgrades and a well-qualified staff bring the TB laboratory up to state-of-the-art for tuberculosis testing.

The Clinical Microbiology Laboratory

The Clinical Microbiology Laboratory uses a combination of 50-year old technology and DNA-probe technology. Fifty-year-old technology is suitable for parasitology because that is still the best way to do the test.

(We do have a modern microscope). Whereas many laboratories have more rapid methods for enteric bacteriology, traditional culture methods are used by the PHL. Strains are identified by serologic methods. Rapid results are important for treatment but in this case, the PHL serves as a reference laboratory and fast turnaround time is not as important. For public health purposes, monitoring serotypes and outbreak identification is important. For these purposes, health departments are finding that they must make use of modern methodology like Pulse Field Gel Electrophoresis (PFGE), which the PHL does not yet have.

Recently, several isolates of *Salmonella thompson* from Baxter County had to be sent out of state to a public health laboratory that performs PFGE. The results clearly showed that the cases were caused by the same strain, and identified the source as a cook who worked in two establishments. The PHL is currently pursuing means to institute this methodology. Fortunately, the volume of testing in parasitology and enteric bacteriology is relatively low, so older methodology in the hands of staff with many years' experience with these methods gives good results.

The volume of testing for gonorrhea and chlamydia is many times higher, about 75,000 tests per year for each. The Gen-Probe methodology, used by all state laboratories in this region, is a hybridization technique that is one of the best non-culture techniques available. Because specimens are shipped to the PHL from all over the state it is necessary to use a non-culture technique. The present positivity rate is about 4% for gonorrhea and 8% for chlamydia. In the future an amplification method for chlamydia will be evaluated. Other states that are using the amplification methodology have found an increase in the positivity rate.

The Immunology Laboratory

The Immunology laboratory also uses both old and new methods. The Venereal Disease Research Laboratory (VDRL) devised a test for syphilis in the 1940s, and it has been used by the PHL for as long as anyone remembers. This test is still recommended by CDC and gives accurate and reliable results. However, it is very labor intensive, which is significant since more than 100,000 syphilis tests are performed yearly. Positive VDRL results are confirmed with the microhemagglutination treponemal test and/or a fluorescent treponemal antibody test. It is necessary to confirm about 6500 tests per year.

Another high volume area is Human Immunodeficiency Virus (HIV) testing. The methodology used is a semi-automated Enzyme Linked Immunoassay (EIA) microtiter method. Though not new technology, this test has proven to be very accurate and sensitive for HIV. This is very cost effective with high volume tests (about 80,000 tests are performed yearly by the PHL). All

samples that repeat positive with the EIA tests are subjected to Western Blot analysis. For some samples (50-60 per year) it is not possible to interpret the EIA – Western Blot tests. Many of these can be attributed to patients' being in the process of converting to positive status. The Polymerase Chain Reaction (PCR) test was started because in most cases a definite result can be obtained and it also decreases the problem window period between exposure and HIV positive status. Otherwise, some patients would have to wait from one to six months to find out their HIV serologic status.

As a pilot project, we recently added the quantitative PCR test, commonly known as the viral load test (PCR test by Roche Diagnostics Systems) and the CD4 and CD8 cell count (by flow cytometry) to our testing menu. The results of these tests allow treatment protocols for AIDS patients to be maximized to protect their immune systems. It is much more expensive to outsource these tests so the pilot project will allow cost savings to be determined and also to discover if it is feasible to transport specimens throughout the state for this purpose. While the amplified test for TB does not require a thermocycler, the viral load test does require this instrument. The thermocycler, of course, can be used for other amplified tests.

Other tests performed by this laboratory include hepatitis B, measles, rubella and some tests for rickettsial and ehrlichial diseases. The EIA methodology is used for hepatitis B core, measles and rubella, for which the IgM antibody is measured. (IgM is a better measurement of recent infection). We are in the process of changing to EIA methodology for most of these tests and will change to the more sensitive PCR tests as soon as possible.

Newborn Screening Laboratory

The PHL may be best known for its newborn screening laboratory. This laboratory has probably performed a PKU (phenylketonuria) test on a majority of the people in Arkansas. For people under the age of 35, this could approach 95%. The PKU test is still performed on all newborns (by state law). The Guthrie method for PKU was used for about 30 years by this laboratory and by virtually every public health laboratory in the USA. This is a remarkably reliable and sensitive test, and very inexpensive. Changing this methodology to the more modern EIA methodology was done because other tests in the newborn screening panel needed to be changed.

In the mid-1970s Radioimmunoassay (RIA) involving a radioactive compound was the best method available for certain analytes like Thyroid Hormone (T4) and Thyroid Stimulating Hormone (TSH). The PHL began using RIA in the 1980s to test for hypothyroidism (T4 and TSH) in the newborn screening program. When the Arkansas law was changed to require testing of ev-

ery newborn for galactosemia, and it was necessary to add EIA methodology to the Newborn Screening Laboratory, it was decided to use the same methodology for all tests. Presently the EIA methodology is used for PKU, T4, TSH, and galactosemia. The EIA methodology has been automated to some extent and has decreased the turnaround time for these tests. Only one test in the newborn screening panel is not performed by EIA.

The test for sickle cell and other hemoglobinopa-

thies is performed on blood from newborns by isoelectrofocusing methodology. This test is also performed on some adult patients. While this method is tried and true, it should be replaced with the newer method, high performance liquid chromatography, which is being used by many other laboratories.

Other tests performed by this laboratory include tests to determine liver function, blood lead (performed by modern graphite furnace methodology), drug analysis by EIA and gas chromatography/mass spectrometry.

Reported Cases of Selected Diseases in Arkansas Profile for January 1999

The 3 month delay in the disease profile for a given month is designed to minimize any changes that may occur due to the effects of late reporting. The numbers in the table below reflect the actual disease onset date, if known, rather than the date the disease was reported.

Disease Name	Total Reported Cases YTD 1999	Total Reported Cases YTD 1998	Total Reported Cases YTD 1997	Total Reported Cases 1998*	Total Reported Cases 1997
Campylobacteriosis	9	6	15	176	175
Giardiasis	18	11	16	167	220
Salmonellosis	27	10	12	616	445
Shigellosis	14	7	19	211	273
Hepatitis A	4	2	33	85	223
Hepatitis B	5	15	6	112	106
Hepatitis C	0	1	0	8	5
Meningococcal Infections	1 2	3 2	2 2	31 76	38 26
Viral/Aseptic Meningitis	1 0	0 1	0 2	13 8	22 27
Ehrlichiosis	0	2	0	24	31
Lyme Disease	0	0	0	26	24
Rocky Mtn Spotted Fever	0	0	0	0	0
Tularemia	0	0	0	13	3
Measles	124	351	396	3962	4388
Mumps	7	28	40	294	394
Gonorrhea	3	2	2	92	60
Syphilis	0	6	20	170	200
Pertussis					
Tuberculosis					

* 1998 data are provisional as of 3/10/99.

For a complete list of reportable diseases in Arkansas, call the Arkansas Department of Health, Division of Epidemiology, at (501)661-2893 during normal business hours.

Looking Back...

Olive A. Charles Wilson, M.D.

Edwina Walls Mann*

Wilson, Olive A. Charles (1860-1944), a physician, was born in Franklin Township, Grant County, Indiana, the daughter of Henry and Olive A. Charles. At the time of the 1860 census, at one month of age, she and her twin brother, Henry E. were the youngest of eight children. In 1891 she graduated from Chicago's Northwestern University Medical College (Women's Medical College of Chicago). From 1896 to 1898, she was Professor of Diseases of Women and Children at the Missouri School of Midwifery.

By 1902 she was a physician at Paragould, Arkansas and by 1905 had been elected secretary of the first councilor district, a component group of the Arkansas Medical Society which included Greene county. She read a paper on Hysteria at that district meeting. On April 12, 1913, she was appointed Paragould's city health officer, the first female government official in Arkansas. The appointment was made only after an attorney general's opinion that a woman could hold the office. Later that month she was named by the State Board of Health as health officer for Greene county. In her work as city health officer, she targeted open privies, manure piles, malaria-breeding stagnant water pools and mosquitoes, and campaigned for an ordinance prohibiting public spitting on the streets. Her campaign for better sanitation was based on educating the public to the simple rules of hygiene both physical and social. She also initiated a campaign to rid the city of "fake peddlers" of medicine.

Also in 1913, Dr. Wilson and several other women physicians, (Dr. Elzora Butler Allen, Dr. Ida Jo Brooks, and Dr. Irene Tatman) organized the Woman's Medical Club of Arkansas at the annual meeting of the Arkansas Medical Society. The organizational meeting was held

in Dr. Wilson's room at the Hotel Marion, and Dr. Wilson was elected president.

She moved to Little Rock in late 1919 and opened an office in the A.O.U.W. Building. She presented a paper on Dysmenorrhea at the 1919 meeting of the Arkansas Medical Society in Little Rock. In the 1920 census, she was listed as Assistant Head of the Pulaski County Hospital in Little Rock but by 1922 was again practicing in Paragould.

Dr. Wilson was very active in the Greene County Medical Society and the Arkansas Medical Society throughout her career and was called the mother of the first councilor district of the Arkansas Medical Society. She was also a member of the American Medical Association throughout her career.

References:

1. American Medical Directory, 1906-1931
2. Arkansas Gazette, May 21, 1913, p. 16
3. Arkansas Gazette, May 22, 1913, p. 1
4. Journal of the Arkansas Medical Society, 1902-1928
5. Monthly Bulletin of the Arkansas Medical Society, v.1 (12):8, 1 May 1905
6. Polk's Medical and Surgical Directory of the United States, 1886 & 1902
7. United States Census, 1860, Grant County, Indiana, p. 319
8. United States Census, 1920, Pulaski County, Arkansas
9. Journal of the American Medical Association, v. 127 (7):510, 17 June 1944.

* Edwina Walls Mann, Chair, Historial Research Center, History of Medicine, University of Arkansas for Medical Sciences Library

New Members

Residents/Interns

Jerome D. Barnes, MD Specialty: PUD
1 Mercy Lane, Suite 401 Phone: 501-623-5220
Hot Springs, AR 71913 Fax: 501-625-5226
Medical School/Graduated: University of Minnesota, 1991

Jerome Gehl, MD Specialty: R
500 S. University, # 108 Phone: 501-664-3914
Little Rock, AR 72205 Fax: 501-664-5246
Medical School/Graduated: University of Iowa College of Medicine, 1979

Asish Kumar Ghosh, MD Specialty: PD
825 N. Spring Street Phone: 870-743-2777
Harrison, AR 72601
Medical School/Graduated: Rejendra Medical College (India), 1983

John R. Holleran, MD Specialty: FP
514 W. Faulkner Phone: 870-864-8010
El Dorado, AR 71730 Fax: 870-875-2706
Medical School/Graduated: Universidad Technologica De Santiago (Dominican Republic), 1987.

Charles Young, MD Specialty: OPH
1609 W. Main Phone: 501-890-0077
Russellville, AR 72801 Fax: 501-890-3488
Medical School/Graduated: Louisiana State University School of Medicine in New Orleans, 1980.

Danuta Gwarnicki, MD Phone: 501-686-6114
4301 W. Markham, 515
Little Rock, AR 72205
Medical School/Graduated: Medical School in Lublin (Poland), 1981.

James C. Nelson, MD
124 Kimberly Circle #221
El Dorado, AR 71730
Medical School/Graduated: UTESA (Dominican Republic), 1990.

Aytekin Ozdemir, MD Phone: 501-686-7980
4301 W. Markham St., # 713
Little Rock, AR 72205
Medical School/Graduated: Ankara University Faculty of Medicine (Turkey), 1981.

Andrea York, MD Phone: 870-779-6042
300 E. 6th Street
Texarkana, AR 71854
Medical School/Graduated: Texas A&M University College of Medicine, 1997.

Students

Brian Downen

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Contact: Vicki Schaff, Director Physician Services/ Recruitment, 800-319-2455, Fax 918-421-8066, email vschaff@mrhc.mcalester.ok.us

In Memoriam

ASHDOWN

Dr. Norman Peacock, Jr., 80, passed away March 8, 1999. Dr. Peacock was a member of the Arkansas Medical Society's 50 year club. He is preceded in death by his first wife, Alfie Price Peacock. He is survived by four sons, N. W. Peacock, III, of Texarkana, TX.; John C. Peacock, of Dumfries, VA.; Charles G. Peacock of Roeland Park, KS.; and Richard T. Peacock of Pine Bluff; a special friend, Mildred Peacock of Ashdown; five grandchildren; three great-grandchildren, two nieces; two nephews.

HOT SPRINGS

Dr. Ronald J. Bracken, 67, retired ophthalmologist passed away February 20, 1999. He is survived by wife, Kaye Thompson Bracken; daughter, Karen Bracken and son and daughter-in-law, David and Lisa Brackem

Dr. Bracken served as a member on the Arkansas Medical Society Council.

LITTLE ROCK

Dr. Troy F. Barnett, Jr., 55, passed away March 13, 1999. As a 1968 graduate of the University of Arkansas School of Medicine, he practiced with the Arkansas Urol-

ogy Clinic since 1977. He is preceded in death by his mother, Vernice Luebke Barnett. He is survived by his father, Troy Franklin Barnett, Sr. of Stuttgart; his wife, Carolyn Rawlings Barnett of Little Rock; his daughter and son-in-law, Suzanna and Brad Cooper of Denver, his son and daughter-in-law, Sam and Laura Barnett of Memphis; his son, Bob Barnett of Little Rock; two granddaughters, Ashley and Danielle Cooper of Denver; his sister and brother-in-law, Kathy and Charles Ames of Dallas; and his niece, Laurie Ames of Dallas.

PARAGOULD

Dr. Richard "Sonny" Martin, 64, died February 21, 1999. He was an anesthesiologist at Arkansas Methodist Hospital in Paragould from 1966-1994, served as Chief of Staff in 1976, bestowed recently the title of "Honorary Chief of Staff" by his medical peers, named Civitan Citizen of the Year in 1998, was a marine Corps veteran and a member of Paragould First United Methodist Church. Survivors include his wife, Sally; three daughters, Linda Black, Janie Harris and Rudi Wilson of Paragould; six grandchildren.

Resolution

Gordon Page Oates, M.D.

WHEREAS, the members of the Pulaski County Medical Society are sincerely saddened by the recent death of an esteemed colleague; Gordon Page Oates, M.D.; and

WHEREAS, Dr. Oates was a loyal member of this Society for forty-five years, always ready and willing to work toward the advancement of organized medicine; and

WHEREAS, under his capable leadership as Pulaski County Health Director the first children's immunization program in Arkansas was established; and

WHEREAS, Dr. Oates manifested his patriotism by thirty-six years of distinguished service in the United States Navy, attaining the rank of Commander;

BE IT THEREFORE RESOLVED:

THAT, this resolution be adopted and placed in the permanent files of the Society; and

THAT, a copy be sent to Dr. Oates' family as an expression of our heart-felt sorrow; and

THAT, a copy be made available to the journal of the Arkansas Medical Society for publication.

Adopted:

January 20, 1999

Board of Directors

By Order of the Memorials Committee

Fred O. Henker, III, M.D., Chairman

Bruce E. Schratz, M.D.

James W. Headstream, M.D.

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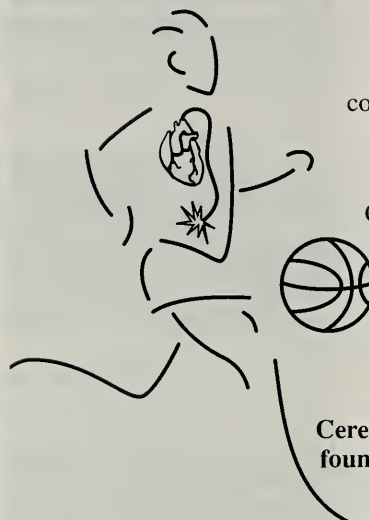
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(318) 677-3100

Things To Come

April 23 - 24, 1999

Oncology in the New Millennium. The Ritz-Carlton Hotel, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education, Washington University School of Medicine. For more information, call 314-362-6891 or 1-800-325-9862.

April 23 - 30, 1999

1999 American Occupational Health Conference. Ernest N. Morial Convention Center, New Orleans, Louisiana. Sponsored by the American College of Occupational and Environmental Medicine. For more information, call 847-228-6850 extension 180; FAX: 847-228-1856; Internet: <http://www.acoem.org>

April 30 - May 2, 1999

Oncology Update 1999 for Primary Care Physicians. LeMeridien Hotel, New Orleans, Louisiana. Sponsored by Tulane Cancer Center and the Center for Continuing Education Tulane University Medical Center. For more information call 504-588-5466 or 800-588-5300.

May 1 - 6, 1999

American Society of Colon and Rectal Surgeons Annual Meeting/Celebrating the Society's 100 Year Anniversary. Washington, D.C. For more information, call 847-290-9184; FAX: 847-290-9203; Website: <http://www.fascrs.org/>.

May 14, 1999

Setting a New Standard of Care: An Office-Based Management Program for Hyperlipidemia in a Managed Care Environment. Presented by the National Association of Managed Care Physicians in conjunction with the American Heart Association and the National Cholesterol Education Program.

May 15, 1999

Excellence in Diabetes Management. Eric P. Newman Education Center, St. Louis, Missouri. Sponsored by the Office of Continuing Medical Education at Washington University School of Medicine. For more information, call 314-362-6891 or 800-325-9862.

May 19 - 21, 1999

Peripheral Artery Disease: Contemporary Strategies for Diagnosis and Therapy. Heart House Learning Center, Bethesda, Maryland. Sponsored by the American College of Cardiology. For more information, call 800-253-4636 ext. 652 or FAX: 301-897-9745

June 7 - 9, 1999

Approach to Advanced Heart Failure: Medical and Surgical Options. Heart House Learning Center, Bethesda, Maryland. Sponsored by the American College of Cardiology. For more information, call 800-253-4636 ext. 652 or FAX: 301-897-9745

Keeping Up

Continuing Medical Education Opportunities in Arkansas

April 29 - May 1, 1999

Arkansas Medical Society's 123rd Annual Session
Park Hilton, Hot Springs Convention Center
Hot Springs, Arkansas

For more information, call 501-224-8967 or 800-542-1058

May 20, 1999 Aug. 27, 1999 Nov. 18, 1999

**Arkansas Foundation for Medical Care
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Sites: UAMS education building/AHEC's and Rural Hospital affiliates. For Specific locations and more information, call Cindy Jones, RN, Quality Improvement Coordinator at AFMC 800-649-8501 ext. 203

Keeping Up

Recurring Education Programs

The following organizations are accredited by the Arkansas Medical Society to sponsor continuing medical education for physicians. The organizations named designate these continuing medical education activities for the credit hours specified in Category 1 of the Physician's Recognition Award of the American Medical Association.

FAYETTEVILLE

VA MEDICAL CENTER

Medical Grand Rounds/General Medical Topics, Thursdays, 12:00 p.m., Auditorium, Bldg. 3

WASHINGTON REGIONAL MEDICAL CENTER

Chest Conference, 1st Wednesday of every month, 12:15-1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided

Grand Rounds Conference, 3rd Wednesday of every month, 7:30-8:30 a.m., Baker Conference Center, breakfast provided.

Primary Care Conferences, every Monday, 12:15-1:15 p.m., WRMC, Baker Conference Center, no fee, lunch provided

Tumor Conference, every Thursday, 7:30-8:30 a.m., WRMC, Baker Conference Center, no fee, breakfast provided

HARRISON

NORTH ARKANSAS MEDICAL CENTER

Cancer Conference, October 22, November 3, and December 22, 12:00 p.m., Conference Room

HOT SPRINGS

ST. JOSEPH'S REGIONAL HEALTH CENTER

Cancer Conference, every Monday, 12:15 p.m., St. Joseph's Mercy Room

Chest Conference, Quarterly on last Tuesday of month beginning November 24, 12:15 p.m., St. Joseph's Mercy Room.

Medicine Not So Grand Rounds, Second Tuesday each month, 12:15 p.m., St. Joseph's Mercy Room. Lunch provided.

LITTLE ROCK

ST. VINCENT INFIRMARY MEDICAL CENTER

Cancer Conferences, Thursdays, 12:00 p.m., Southwestern Bell/Arkla room. Lunch provided.

General Surgery Grand Rounds, 1st Thursday, 7:00 a.m. Southwestern Bell/Arkla Room. Light breakfast provided.

Interdisciplinary AIDS Conference, 2nd Friday, 12:00 p.m., Southwestern Bell/Arkla Room. Lunch provided.

Journal Club, Tuesdays, 12:00 p.m., Southwestern Bell/Arkla Room. Lunch provided.

Pulmonary Conference, 4th Wednesday, 12:00 p.m., Southwestern Bell/Arkla Room. Lunch provided.

BAPTIST MEDICAL CENTER

Breast Conference, 3rd Thursday, 7:00 a.m., J. A. Gilbreath Conference Center

Gastroenterology/Surgery Journal Club, dates vary, AR Gastroenterology Memorial Medical Plaza, Suite 3A. Call 501-202-2673 or 202-3888 for more information.

Grand Rounds Conference, Wednesdays, 12:00 p.m., Shuffield Auditorium. Lunch provided.

Pulmonary Conference, Tuesdays, 12:00 p.m., Shuffield Auditorium. Lunch provided.

Sleep Disorders Case Conference, dates vary, 12:00 p.m. Call 202-2673 for date and location. Lunch provided.

MOUNTAIN HOME

BAXTER COUNTY REGIONAL HOSPITAL

Lecture Series, 3rd Tuesday, 6:30 p.m., Education Building

Tumor Conference, Tuesdays, 12:00 p.m., Carti Boardroom

The University of Arkansas College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to sponsor the following continuing medical education activities for physicians. The Office of Continuing Medical Education designates that these activities meet the criteria for credit hours in category 1 toward the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

LITTLE ROCK

ARKANSAS CHILDREN'S HOSPITAL

Faculty Resident Seminar, 3rd Thursday, 12:00 p.m., Sturgis Auditorium

Genetics Conference, Wednesdays, 1:30 p.m., Conference Room, Springer Building

Infectious Disease Conference, 2nd Wednesday, 12:00 p.m., 2nd Floor Classroom

Pediatric Grand Rounds, Tuesdays, 8:00 a.m., Sturgis Bldg., Auditorium

Pediatric Neuroscience Conference, 1st Thursday, 8:00 a.m., 2nd Floor Classroom

Pediatric Pharmacology Conference, 5th Wednesday, 12:00 p.m., 2nd Floor Classroom

Pediatric Research Conference, 1st Thursday, 12:00 p.m., 2nd Floor Classroom

UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

ACRC Multi-Disciplinary Cancer Conference (Tumor Board), Wednesdays, 12:00 p.m., ACRC 2nd floor Conference Room.

Anesthesia Grand Rounds/M&M Conference, Tuesdays, 6:00 a.m., UAMS Education III Bldg., Room 0219

Autopsy Pathology Conference, Wednesdays, 8:30 a.m., VAMC-LR Autopsy Room

Cardiology-Cardiovascular & Thoracic Surgery Conference, Wednesdays, 11:45 a.m., UAMS, Shorey Bldg., room 3S/06

Cardiology Grand Rounds, 2nd & 4th Mondays, 4:00 p.m., UAMS Shorey Bldg., 3S/06

Cardiology Morning Report, every morning, 7:30 a.m., UAMS, Shorey Bldg. room 3S/07

Cardiothoracic Surgery M&M Conference, 2nd Saturday each month, 8:00 a.m., UAMS, Shorey Bldg. room 2S/08

CARTI/ Searcy Tumor Board Conference, 2nd Wednesday, 12:30 p.m., CARTI Searcy, 405 Rodgers Drive, Searcy.

Centers for Mental Healthcare Research Conference, 1st & 3rd Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research

CORE Research Conference, 2nd & 4th Wednesday each month, 4:00 p.m., Freeway Medical Tower Bldg., 6th floor Conference Room at Centers for Mental Healthcare Research

Endocrinology Grand Rounds, Fridays, 12:00 p.m., ACRC Bldg., Sam Walton Auditorium, 10th floor

Gastroenterology Grand Rounds, Thursdays, 4:00 p.m., UAMS Hospital, room 3D29 (1st Thurs. at ACH)

Gastroenterology Pathology Conference, 4:00 p.m., 1st Tuesday each month, UAMS Hospital

GI/Radiology Conference, Tuesdays, 8:00 a.m., UAMS Hospital, room 3D29

In-Vitro Fertilization Case Conference, 2nd & 4th Wednesdays each month, 11:00 a.m., Freeway Medical Tower, Suite 502 Conf. Rm

Medical/Surgical Chest Conference, each Monday, 4:00 p.m., UAMS Hospital, room M1/293

Medicine Grand Rounds, Thursdays, 12:00 p.m., UAMS Education II Bldg., room 0131

Medicine Research Conference, one Wednesday each month, 4:30 p.m. UAMS Education II Bldg. room 0131A

Neuropathology Conference, 2nd Wednesday each month, 4:00 p.m., AR State Crime Lab, Medical Examiner's Office

Neurosurgery, Neuroradiology & Neuropathology Case Presentations, Thursdays, 4:00 p.m., UAMS Hospital

OB/GYN Fetal Boards, 2nd Fridays, 8:00 a.m., ACH Sturgis Bldg.

OB/GYN Grand Rounds, Wednesdays, 7:45 a.m., UAMS Education II Bldg., room 0141A

Ophthalmology Problem Case Conference, Thursdays, 4:00 p.m., UAMS Jones Eye Institute, 2 credit hours

Orthopaedic Basic Science Conference, Tuesdays, 7:30 a.m., UAMS Education II Bldg., room B/107

Orthopaedic Bibliography Conference, Tuesdays, Jan. - Oct., 7:30 a.m., UAMS Education II Bldg.

Orthopaedic Fracture Conference, Tuesdays, 9:00 a.m., UAMS Education II Bldg., room B/107

Orthopaedic Grand Rounds, Tuesdays, 10:00 a.m., UAMS Education II Bldg., room B/107

Otolaryngology Grand Rounds, 2nd Saturday each month, 9:00 a.m., UAMS Biomedical Research Bldg., room 205

Otolaryngology M&M Conference, each Monday, 5:30 p.m., UAMS Otolaryngology Conf. Room

Perinatal Care Grand Rounds, every Tuesday, 12:15 p.m., BMC, 2nd floor Conf. Room

Psychiatry Grand Rounds, Fridays, 11:00 a.m., UAMS Child Study Center Auditorium

Surgery Grand Rounds, Tuesdays, 8:00 a.m., ACRC Betsy Blass Conf.

Surgery Morbidity & Mortality Conference, Tuesdays, 7:00 a.m., ACRC Betsy Blass conference room, 2nd floor

NLRVA Geriatric/Medicine Grand Rounds, Thursdays, 8:00 a.m., VAMC-NLR, Bldg 68, room 130

VA Medical Service Clinical Case Conference, Fridays, 12:00 p.m., VAMC-LR, room 2D109

VA Pathology-Hematology/Oncology-Radiology Patient Problem Conference, Thursdays, 8:15 a.m., VAMC-LR, room 2E142

VA Psychiatry Difficult Case Conference, 4th Monday, 12:00 p.m., VAMC-NLR, Mental Health Clinic

VA Lung Cancer Conference, Thursdays, 3:00 p.m., VAMC-LR, room 2E142

VA Medical Service Teaching Conference, Thursdays, 8:00 a.m., VAMC-NLR, Bldg. 68 room 130

VA Medicine-Pathology Conference, Tuesday, 2:00 p.m., VAMC-LR, room 2D109

VA Medicine Resident's Clinical Case Conference, Fridays, 12:00 p.m., VAMC-LR, room 2D08

VA Physical Medicine & Rehab Grand Rounds, 4th Friday, 11:30 a.m., VAMC-NLR Bldg. 68, room 118 or Baptist Rehab Institute

VA Surgery Grand Rounds, Thursdays, 12:45 p.m., VAMC-LR, room 2D109, 1.25 credit hours

VA Topics in Rehabilitation Medicine Conference, 2nd, 3rd, & 4th Thursdays, 8:00 a.m., VAMC-NLR Bldg. 68, room 118

VA Weekly Cancer Conference, Monday, 3:00 p.m., VAMC-LR, room 2E-142

White County Memorial Hospital Medical Staff Program, once monthly, dates & times vary, White County Memorial Hospital, Searcy

EL DORADO-AHEC

Arkansas Children's Hospital Pediatric Grand Rounds, every Tuesday, 8:00 a.m., Warner Brown Campus, 6th fl. Conf. Rm.

Behavioral Sciences Conference, 1st & 4th Friday, 12:15 p.m., AHEC

Chest Conference, 3rd Wednesday, 12:15 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.

Dermatology Conference, 1st Tuesdays and 1st Thursdays, AHEC

GYN Conference, 2nd Friday, 12:15 p.m., AHEC

Internal Medicine Conference, 1st, 2nd & 4th Wednesday, 12:15 p.m., AHEC

Noon Lecture Series, 2nd & 4th Thursday, 12:00 p.m., Union Medical Campus, Conf. Rm. #3. Lunch provided.

Obstetrics-Gynecology Conference, 4th Thursday, 12:15 p.m. AHEC

Pathology Conference, 2nd Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5. Lunch provided.

Pediatric Conference, 3rd Friday, 12:15 p.m., AHEC

Pediatric Case Presentation, 3rd Tuesday, 3rd Friday, AHEC

Surgical Conference, 1st, 2nd & 3rd Monday, 12:15 p.m., AHEC

Tumor Clinic, 4th Tuesday, 12:15 p.m., Warner Brown Campus, Conf. Rm. #5, Lunch provided.

VA Hematology/Oncology Conference, Thursdays, 8:15 a.m., VAMC-LR Pathology conference room 2E142

FAYETTEVILLE-AHEC NORTHWEST

AHEC Teaching Conferences, Tuesdays & Wednesdays, 12:00 p.m., AHEC Classroom

AHEC Teaching Conferences, Fridays, 12:00 p.m., AHEC Classroom

AHEC Teaching Conferences, Thursdays, 7:30 a.m., AHEC Classroom

Medical/Surgical Conference Series, 4th Tuesday, 12:30, Bates Medical Center, Bentonville

FORT SMITH-AHEC

Grand Rounds, 12:00 p.m., first Wednesday of each month, Sparks Regional Medical Center

Neuroradiology Conference, 1st Tuesday of each month, 12:00 p.m., Sparks Regional Medical Center, 7th floor dining room

Neuroscience & Spine Conference, 3rd Wednesday each month, 12:00 p.m., St. Edward Mercy Medical Center

Tumor Conference, Mondays, 12:00 p.m., St. Edward Mercy Medical Center

Tumor Conference, Wednesdays, 12:00 p.m., Sparks Regional Medical Center

JONESBORO-AHEC NORTHEAST

AHEC Lecture Series, 1st & 3rd Tuesday, 12:00 p.m., Stroud Hall, St. Bernard's Regional Medical Center. Lunch provided.

Arkansas Methodist Hospital CME Conference, 7:30 a.m., Hospital Cafeteria, Arkansas Methodist Hospital, Paragould

Chest Conference, 2nd Tuesday, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch provided.

Citywide Cardiology Conference, 3rd Thursday, 7:30 p.m., Jonesboro Holiday Inn

Clinical Faculty Conference, 5th Tuesday, St. Bernard's Regional Medical Center, Dietary Conference Room, lunch provided

Craighead/Poinsett Medical Society, 1st Tuesday, 7:00 p.m. Jonesboro Country Club

Greenleaf Hospital CME Conference, monthly, 12:00 p.m., Greenleaf Hospital Conference Room. Lunch provided.

Independence County Medical Society, 2nd Tuesday, 6:30 p.m., Batesville Country Club, Batesville

Interesting Case Conference, 4th Tuesday, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch provided.

Jackson County Medical Society, 3rd Thursday, 7:00 p.m., Newport Country Club, Newport

Kennett CME Conference, 3rd Monday, 12:00 p.m., Twin Rivers Hospital Cafeteria, Kennett, MO

Methodist Hospital of Jonesboro Cardiology Conference, every other month, 7:00 p.m., alternating between Methodist Hospital Conference Room and St. Bernard's, Stroud Hall. Meal provided.

Methodist Hospital of Jonesboro CME Conference, 2nd Tuesday, 7:00 p.m., Cafeteria, Methodist Hospital of Jonesboro

Neuroscience Conference, 3rd Monday, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch Provided.

Orthopedic Case Conferences, every other month beginning in January, 7:30 a.m., NE Arkansas Rehabilitation Hospital

Perinatal Conference, 2nd Wednesday, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch provided.

Piggott CME Conference, 3rd Thursday, 6:00 p.m., Piggott Hospital. Meal provided.

Pocahontas CME Conference, 3rd Wednesday, 12:00 p.m. & 7:30 p.m., Randolph County Medical Center Boardroom

Tumor Conference, Thursdays, 12:00 p.m., St. Bernard's Dietary Conference Room. Lunch provided.

Walnut Ridge CME Conference, 3rd & last Tuesday, 12:00 p.m., Lawrence Memorial Hospital Cafeteria

White River CME Conference, 3rd Thursday, 12:00 p.m., White River Medical Center Hospital Boardroom

PINE BLUFF-AHEC

Behavioral Science Conference, 1st & 3rd Thursday, 12:00 p.m., Jefferson Regional Medical Center

Chest Conference, 2nd & 4th Friday, 12:00 p.m., Jefferson Regional Medical Center

FP Journal Club, 2nd Monday, 12:00 p.m., Jefferson Regional Medical Center

Internal Medicine Conference, 2nd & 4th Thursdays, 12:00 p.m., Jefferson Regional Medical Center

Obstetrics/Gynecology Conference, 2nd Tuesday, 12:00 p.m., Jefferson Regional Medical Center

Orthopedic Case Conference, 2nd & 4th Wednesdays, 12:00 p.m., Jefferson Regional Medical Center.

Pediatric Conference, 3rd Wednesday, 12:00 p.m., Jefferson Regional Medical Center

Radiology Conference, 3rd Tuesday, 12:00 p.m., Jefferson Regional Medical Center

Southeast Arkansas Medical Lecture Series, 4th Tuesday, 6:30 p.m., Locations vary. Dinner meeting.

Tumor Conference, 1st Wednesday & 3rd Friday, 12:00 p.m., Jefferson Regional Medical Center

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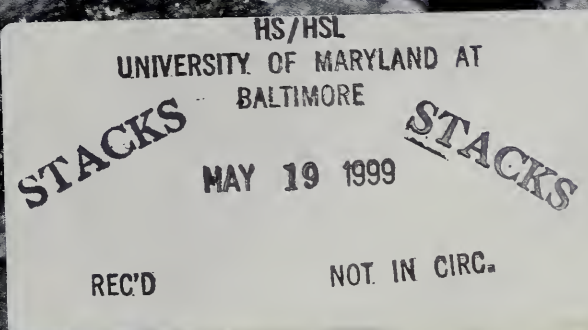
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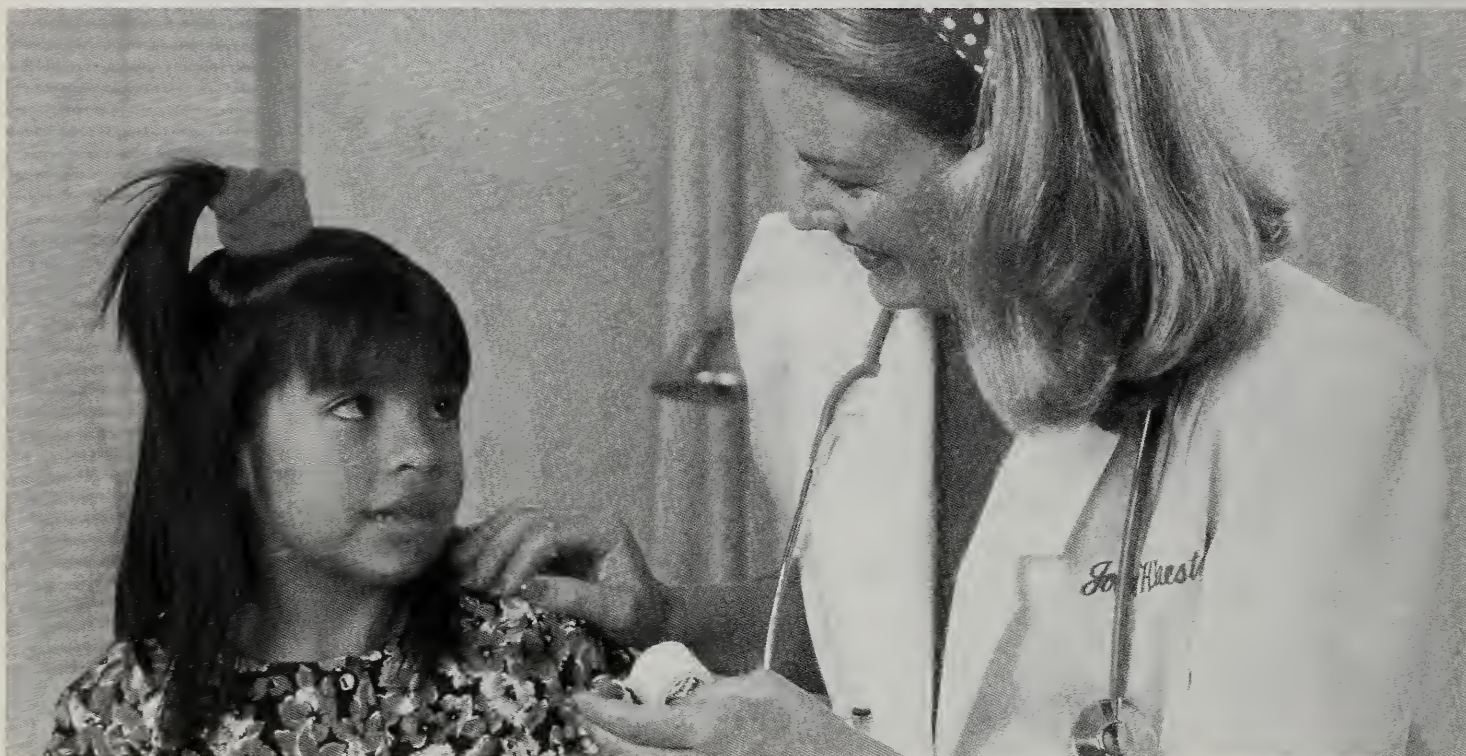
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An Approach to the Physical Examination of Young Children

Jerry Byrum, M.D.*



With some patience, a small investment of time, some trustworthiness, sensitivity and compassion, we can all do a better job of caring for our children in medical practice without terrorizing them.

For the most part, I really enjoy the practice of pediatrics. Interacting with my patients brings fulfillment like nothing else I know. It is a privilege and an honor to be able to practice pediatrics.

However, there is one situation that keeps coming up with regularity in my practice, which is one of those things that makes me wince with dread whenever it is about to happen. It is usually something that you can see coming before it arrives. It usually begins something like this.

You note that in the door rack, the chart of the person you are about to see next is very thin. You notice that it is so thin that it must be the chart of a new patient. A quick glance at the chart confirms your fears. You are about to see a 2-year-old who is new to the practice. This precious, little child does not know you and in fact has had numerous very unpleasant experiences during his contact with the medical profession in his brief lifetime. He vividly remembers these experiences. As you enter the room, an immediate evaluation of his body language makes you realize that this child is very frightened and that likely, there will be little cooperation with the examina-

tion. In fact, get ready, you realize that you are in for a screaming fit.

Now before you jump to false conclusions, please know that I enjoy meeting new people. Goodness knows that new patients are needed in a practice. I welcome them. No, what is frustrating about this problem is that to a large extent it could be prevented. To get an idea of what I am talking about, consider the content of an editorial from last year in one of the prominent pediatric journals.

The content of the editorial was on the hazards of noise exposure from crying children to health care workers who render them medical care. The author stated that he

* Dr. Byrum is a specialist in Pediatrics. He practices at All For Kids Pediatric Clinic in Little Rock. Dr. Byrum is also a member of the editorial board for *The Journal of the Arkansas Medical Society*.

feared he was sustaining hearing damage as a result of repeated exposure to crying infants and children in the examination room. From the tone of the article, it was obvious that he felt that it was obligatory for physicians who care for children to be exposed to continuous, loud crying. It is for this physician and others whose hearing is in danger that I write this editorial. Please know that you do not have to lose your hearing to treat children. There is a better way.

It seems a bit strange to write an editorial on the approach to doing a physical exam on a child. But repeatedly, I find that many doctors have difficulty in this area. If you deal with children in your practice, I hope that you find this material helpful.

Rapport: According to Stedman's Dictionary, this word means, "a feeling of relationship, especially when characterized by emotional affinity." I can remember hearing this word

many times in my training years. I remember hearing it defined. I remember hearing how important it was to develop rapport between a patient and doctor. However, what I do not remember hearing much about were the specifics of how to establish rapport with a patient, particularly the very young patients we see in pediatrics.

Although the principles for developing rapport are the same for all patients, the approach to developing a relationship of emotional affinity with a 2-year-old is very different than with a 50-year-old. It is these specifics that I would like to discuss.

Although the term "rapport" is the classic description of the doctor-patient relationship, I have come to appreciate and to use different terms for describing a successful doctor-patient relationship. I have chosen to use the more descriptive phrase of "connecting with patients". This

"connection" or "relationship characterized by emotional affinity" requires on the doctor's part, effective communication, trust, truthfulness, relational warmth, self-confidence and empathy. Believe it or not, young children, even those less than one or two years of age can respond very positively to a physician who employs the proper age appropriate relational techniques.

The sad truth is that many physicians and other health care providers who care for children do not attempt to develop rapport with their very young patients under two or three years of age. Sometimes there is little or no direct communication between the physician and patient.

The physical exam is characterized as a forced exam in which the child does not cooperate but instead is restrained against his will. Although the child is communicat-

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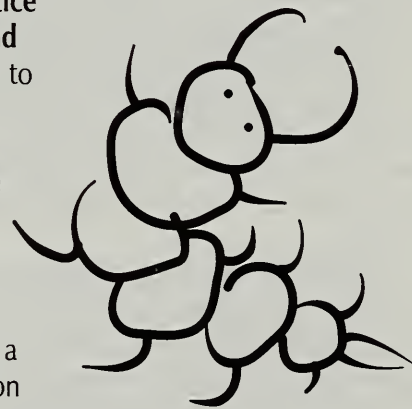
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ing emotional discomfort with his crying, this is ignored by the physician and the cycle continues and worsens. We need to realize that a child's fearful crying during an examination is communication. The communication goes something like this. "I am frightened of you. People like you have hurt me in the past. I don't trust you. You are a stranger. You are bigger than I am. It looks like your instruments will hurt me. Why are you holding me down? I really don't like it here. I really don't like you. Mom, take me home!"

How does one build rapport with the very young patient in a busy practice? I certainly don't know all there is to know about the subject. I am sure there are many of you who are far better at developing rapport with young children than I am. I suppose there are as many ways of doing this as there are doctors. We all have our own style of practice. However, there are some principles in dealing with children which can be of help to all of us who treat them. Let us discuss some of these principles.

First of all, relax and be yourself. It is frightening to a child to be examined by a nervous, jittery person. Children can detect nervous tension with great sensitivity. Cold hands are particularly alarming to kids. If your hands are prone to being cold, wash them in hot water just before beginning your examination. A calm, confident, warm, upbeat, honest person goes a long way toward reassuring a youngster.

You should avoid any hint of formality and aloofness. For these reasons, I have chosen to take off the traditional white coat and remove the tie. If your practice or institution requires a white coat and a tie, place a small fuzzy animal on your stethoscope or use some other warm, playful device to soften the formal impact. If none of the above are possible, laughter and a smile communicate volumes about your intentions.

I have found upon entering the room that it is helpful to first make eye contact with the child and not

the parent. I address the child by name, "Well good morning Ashley, I'm glad to you see today." Next, find something to compliment about the child and mean it when you say it. "Why Ashley, you have the most beautiful eyes." Parents generally don't mind being ignored if you focus your attention on their child.

These initial moments set the tone of the visit. Should the child ignore you and bury her head in the parent's shoulder, please know that this is communication that the child is not accepting your presence in the room. Be patient and try another approach at eye contact with the child. Should the child continue to avoid acknowledging your presence this signals that this visit may well be challenging.

After the history is taken from the parent(s) and the time for the examination has arrived, don't make the advance toward the child too quickly. The advance of an unknown adult is frightening to a child because they do not know your intentions. I find that examining a child on the parent's lap is a good way to overcome many objections to the examination.

Should you advance too fast and the child begins to cry, stop and physically back up, not pressing forward. This action communicates your intentions that you are not threatening them, that you do not desire to harm them and that you acknowledge their desire to be approached on their own terms.

Next, explain to the child what you will be doing during your examination. "Billy, would you mind if I look in your ears and mouth, and listen to your tummy?" Asking for permission to examine the child disarms their fears. If you ask, in the vast majority of cases they will grant you their permission. By the way, do not assume that very young children cannot understand what you are saying. Even children less than a year old have an amazing capacity to comprehend what is being said and communicated. I talk freely even

with newborn babies. The tone of your voice communicates with them and is reassuring to them. As you are interacting with children, do not interpret a child's silence as not understanding. Many children will remain quiet, all the while being very alert to every interaction in the room.

When it is time to begin the examination, encourage the child to touch your instruments with their fingers. Medical instruments are frightening (even to adults). Particularly if the child has experienced pain before in the medical care setting, such as with an injection or other painful experience, this action will help calm their fears.

Try your best not to force a child to cooperate by restraining them. This is usually unnecessary and provokes rage. Allow them to touch your hand and instruments as you examine them. This freedom from restraint is usually a major key in developing excellent rapport with children in the family.

In communicating with a child regarding any needed painful procedures, do not tell a child something will not hurt if you know that it will. If you know that the procedure will be extremely painful, let the child know that. Otherwise, you have destroyed trust which is next to impossible to rebuild once it is lost. I find that if I am honest, and tell a child beforehand that a procedure will be painful, that they can forgive me for that pain and keep our relationship intact. However, any dishonesty on my part destroys that relationship of trust.

When the examination is over, praise the child for successfully letting you examine them. Have the parents rehearse what you will do during the next visit. Have them buy a doctor's bag to "play doctor."

With some patience, a small investment of time, some trustworthiness, sensitivity and compassion, we can all do a better job of caring for our children in medical practice without terrorizing them. At the same time we keep our hearing intact.

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Surgeon Speaks on Telepresence Surgery

Dr. Russ Zajtcuk of Chicago gave a lecture April 13 at UAMS on the state of telepresence surgery, which allows surgeons to perform surgery from a distant location.

Zajtcuk, vice president for Advanced Technologies and International Health at Rush-Presbyterian - St. Luke's Medical Center and Rush University, spoke to UAMS faculty and staff about the procedure, which is still in its infancy.

In a specially equipped telemedicine surgery room, he wears metal actuators on each hand and lens goggles with small TV screens built in for "seeing" the patient three dimensionally. At the remote surgery site, robot hands perform the surgery according to his hand movements.

As the surgeon looks into the goggles, he can move his hands and the robot performs the identical motion on the patient — cutting, clamping, suturing and even tying knots. Sensors located on the robot and on mechanisms worn by the surgeon allow him to feel a ligament in the way of an incision, so he can sense the resistance and work around it.

Ann Bynum, director of the Rural Hospital Program at UAMS, envisions using the technology to perform on patients in rural areas. "A person injured in a machinery accident on a farm could be taken to a rural hospital and operated on by a telepresence surgeon at UAMS," she said.

Provided by the UAMS Office of University Relations.

Family Physicians Find Good, Bad in Federal Budget

The American Academy of Family Physicians found things to like and things not to like about the

Clinton administration's fiscal year 2000 budget proposals last month.

Among the proposals applauded by the group was a plan for a 21 percent increase in funding — from \$171 million this year to \$206 million in FY 2000 — for the Agency for Health Care Policy and Research. The increase is important, the academy said, for aiding in the translation of research findings to "everyday medical practice."

On the downside was what the group called a "disappointing setback" in the recommendation of no funding for the Title VII cluster that includes family medicine training. Another criticism was a plan for Medicare providers to be assessed \$194.5 million in user fees to help cover the program's operating costs — including a possible \$1 charge for each paper claim filed for reimbursement.

A summary of the AAFP's views on the federal budget plan can be accessed from the group's Web site at www.aafp.org/gov/fed/990204.html.

Provided by FP Report, the American Academy of Family Physicians.

Tax Credits for the Uninsured Should be Targeted to Most Needy

A tax credit for people lacking health insurance should minimize "substitution," target those most in need, and provide a big enough subsidy to be effective, said Dr. Whitney Addington, American College of Physicians-American Society of Internal Medicine president-elect, during a recent Capitol Hill briefing.

Addington described several current congressional proposals for a health insurance tax credit as positive starting points, but noted that most fall short on meeting three main criteria for success:

- Any tax credit should contribute enough to make affordable coverage available to low-wage/low in-

come uninsured people, typically those at 150 percent of the federal poverty level.

- The credit should minimize incentives for insured persons to substitute the tax credits for existing coverage.

- The tax credit proposal should clearly define the administrative structure to implement the tax credits for existing coverage.

The ACP-ASIM noted that a plan it unveiled in February was designed to address these concerns based on past governmental experience with tax credits.

For example, by limiting the credit to adults with incomes between 100 to 50 percent of the federal poverty level, the problem of substitution is largely eliminated since this group represents people most likely to have no other source of insurance.

The amount of the credit is important too, since participation for low-income people falls off rapidly as cost sharing increases. The ACP-ASIM plan calls for a tax credit at the amount of \$2,800 at 100 percent of poverty and \$2,400 at 150 percent. This is sufficient to buy a health insurance policy equivalent to a standard Blue Cross/Blue Shield plan, society officials said.

An advance payment option also must be provided, since low-income people can rarely afford to wait until tax time to receive the necessary funds.

The ACP-ASIM plan suggests using the state infrastructure currently used for administering the Child Health Insurance Program to administer its tax credit plan. By contrast, some of the other current proposals before Congress suggest relying on the Internal Revenue Service.

The CHIP's administrative structure, the ACP-ASIM notes, is already in place and is conducting outreach to the same basic group, i.e., children in families at 150 percent of poverty. The

outreach for the adult tax credit could simply be "piggybacked" on the current CHIP's program, as could the eligibility verification requirements.

In addition to the tax credit proposal, the ACP-ASIM plan also suggests expanding Medicaid, increasing funding for Medicaid enrollment outreach efforts, and providing insurance subsidies to temporarily unemployed and uninsured workers phased out at 250 percent of poverty. The plan would be paid for by funds equivalent to 12.6 percent of the projected federal budget surplus.

"Incremental expansions, however, should only be viewed as a 'down payment' toward universal coverage, not as an end in themselves," Addington said. "We can only really rest when all of our fel-

low citizens are covered by a decent health insurance policy."

ACP-ASIM is the nation's largest medical specialty organization and the second largest physician group, with more than 115,000 internal medicine physicians and medical students as members.

Provided by a ACP-ASIM news release.

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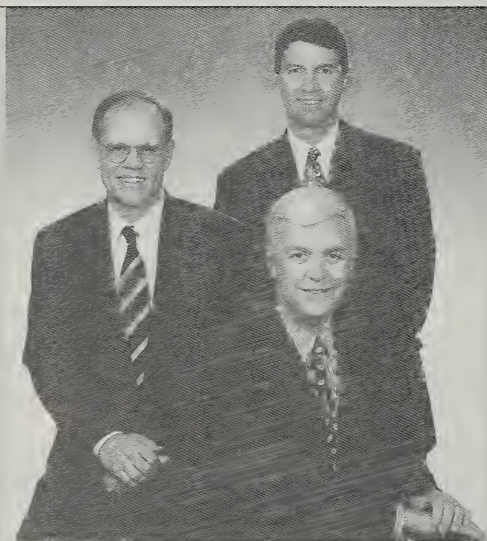
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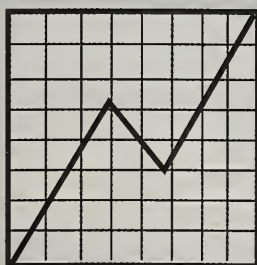
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AMS Newsmakers

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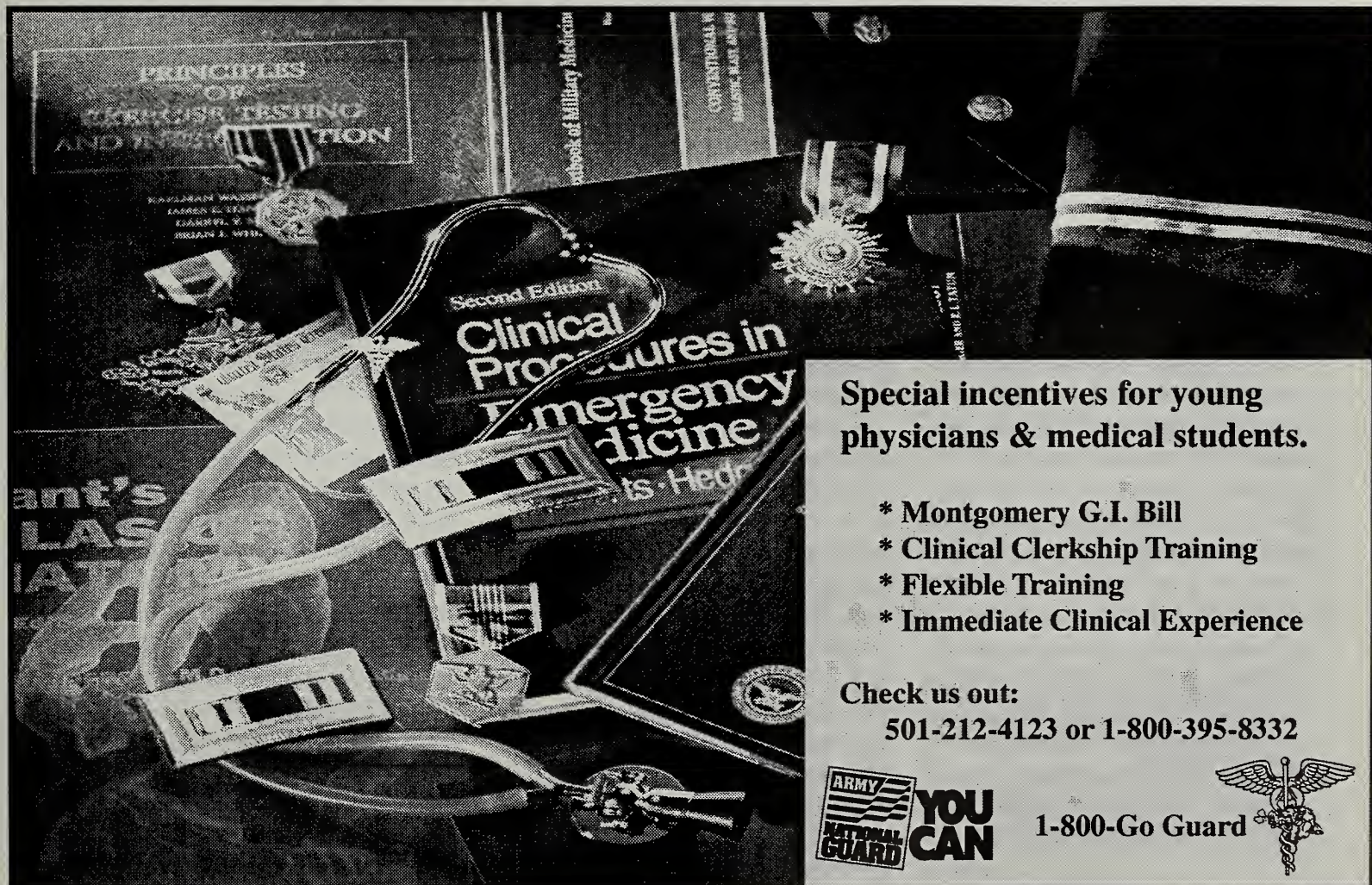
Physicians Volunteer Time in Free Clinics

Drs. **W. Turner Harris**, **Alastair Hall**, **Joan Kyle** and **A.T. Gillespie** of Pulaski County recently participated in *Volunteers in Medicine*, a new program that calls for doctors to come out of retirement or take time away from their practices to serve as volunteer

staff at free community clinics. The program is a joint venture of St. Vincent Health System and the Partnership For A Healthy Community.

Harris had the idea for the program, saying he started thinking about "all the knowledge going to waste in the community." Many retired doctors either drifted away from the medical community or got involved in mission trips overseas, he said in a recent interview. With free clinics set up at Cloverdale Junior High School and the Glenview Recreation Center, Harris compared the opportunity for the doctors to "practicing medicine the way we first thought we were going to on our first day of medical school," without the worry of billing, insurance and other concerns.


A St. Vincent spokesman said the number of clinics would increase as more physicians volunteered time for the program.




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Multidisciplinary Approach for the Management of Post-Herpetic Neuralgia in Elderly Patients

William E. Ackerman, III, M.D.*
Mahmood Ahmad, M.D.**

Introduction

Herpes zoster occurs at all ages, but its incidence is highest among individuals in the sixth through the eighth decades of life.¹ It is caused by the varicella-zoster virus (VZV). This DNA virus causes chickenpox in children. The clinical condition of shingles in elderly patients is a result of reactivation of the latent VZV virus in the dorsal root ganglion of the spinal cord. Clinical diagnosis is based on the appearance of papules and vesicles in a dermatomal distribution. The presence of multinucleated giant cells on a cytological smear of a vesicle confirms the diagnosis. When the pain of acute herpes zoster persists beyond the resolution of the rash, which is usually 2-3 weeks, post-herpetic neuralgia occurs. The incidence of post-herpetic neuralgia is also higher in elderly patients. It

occurs in about 40% of patients over 60 years of age. Loeser reported that the increased incidence in these patients is a result of a decrease in antibody titers.² Herpes zoster can affect healthy patients but usually immunosuppressed patients are at a higher risk. Immunosuppressive drugs, malignancy, local irradiation, surgery, and even trauma can cause predisposition to the herpes zoster infection. It can re-occur in 6% of patients, usually at the same site of the initial lesion.

Pathophysiology of Pain in Herpes Zoster

Reactivation of the latent VZV produces an inflammatory reaction in the involved nerve causing pain.³ A severe inflammatory response produces intense sympathetic stimulation, causing vasoconstriction. This can reduce the blood flow in the intraneural capillary bed by 93%.⁴ This is substantiated by the fact that thermography demonstrates lower temperatures in the corresponding areas of pain. With the decrease in blood flow, nerve ischemia can be prolonged.⁵ As a result; there is anoxic damage to the

nerve with resultant edema. Edema can impair endoneurial blood flow and cause irreversible nerve damage. The reduction in blood flow causes destruction of large nerve fibers with survival of small fibers. Histological study by Noordenbos comparing cross-sections of post-herpetic and normal nerves in humans showed that the majority of large nerve fibers were destroyed and replaced by fibrous tissue.⁶ Post-herpetic neuralgia is transmitted by small fibers. It is postulated that large fibers inhibit the entry of noxious impulses into the central nervous system while small fibers enhance this entry. The gate-theory advocates that the effect of large fiber predominance is to modify the entry of noxious impulses into the spinal cord.⁷ The purpose of the injection therapy therefore, is to interrupt the sympathetic response responsible for the ischemic changes of the affected nerve fibers. This interruption should occur before damage to the large fibers becomes irreversible. Winnie et al. concluded that if treatment is delayed, the changes secondary to ischemia become progressively

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** Mahmood Ahmad, M.D., Fellow in Pain Medicine, Department of Anesthesiology, University of Arkansas for Medical Sciences

worse. After two months, large fiber death occurs and nerve damage is essentially irreversible.³

The thoracic area is most frequently involved (60%), followed by the trigeminal area (20%), cervical spine (10%), lumbar spine (5%) and sacral area (<5%). On occasion, the infection may be in a peripheral somatic nerve.¹ If the lesion is in the thoracic dermatomes; the pain may mimic myocardial infarction, cholecystitis or pleurisy. Ophthalmic involvement should be suspected with presence of vesicles on the tip of the nose or lesions on the cornea. A prompt consultation with an ophthalmologist is indicated when the cornea is involved.

The Ramsay Hunt syndrome is a result of an infection involving the geniculate ganglion (seventh cranial nerve), which presents with pain in the ear. In such cases a consultation with a neurologist is advisable. The pain in the distribution of the affected nerve root may precede the rash by several days.

Post-herpetic neuralgia varies from a mild discomfort to a severely debilitating and agonizing pain. It is usually exacerbated by light touch however it can occur without stimulation. An important symptom in the diagnosis of herpes zoster pain is the presence of dysesthesia, which is an unpleasant sensation on light touch. The severity of pain increases with age. When the pain is severe, it may produce severe emotional incapacitation and can be associated with a high rate of suicide.⁸ As a result, aggressive treatment of acute herpes zoster in elderly patients is indicated.

Multidisciplinary Approach

Prior to referral to a multi-disciplinary pain center, patients usually have had a trial of oral and topical antiviral agents, nonsteroidal anti-inflammatory drugs, other analgesics, corticosteroids and antidepressants. Antiviral agents and topi-

The Ramsay Hunt syndrome is a result of an infection involving the geniculate ganglion (seventh cranial nerve), which presents with pain in the ear.

cal analgesics can accelerate skin healing and decrease the pain of acute herpes zoster, but do not affect the incidence of post-herpetic neuralgia. It was thought that acyclovir would prevent the onset of post-herpetic neuralgia and was reported to be a replacement for sympathetic block therapy.

If conservative management does not alleviate a patient's pain and if the pain persists after the rash disappears, the primary care physician should consider early referral to a pain medicine center for other therapeutic modalities.

Transdermal clonidine may have some effect in decreasing the incidence of post-herpetic neuralgia and may reduce acute herpes zoster pain.⁹ It can cause orthostatic hypotension, particularly in the elderly. No clinical documentation exists of the complete resolution of pain with transdermal clonidine.

Topically applied agents, such as capsaicin, with topical lidocaine or eutectic mixture of local anesthetic (EMLA) cream may be helpful. Capsaicin will deplete and prevent the reaccumulation of substance P in peripheral neurons.¹⁰ However, patients may complain of severe burning pain after the application of capsaicin. This can be avoided with prior application of a topical local anesthetic, such as EMLA cream.

Rosenak accidentally discovered the therapeutic effects of injection therapy with respect to herpes zoster in 1938 while treating severe peripheral vascular disease with lumbar sympathetic blocks. Rosenak found that sympathetic blockade had a significant affect on the pain of herpes zoster.¹⁰ One of the first controlled double-blinded randomized studies was performed by Tenicela.¹¹ He

demonstrated the efficacy of sympathetic blockade in terminating acute herpes zoster pain. Colding extensively studied patients with acute herpes zoster and concluded the earlier the treatment with sympathetic blockade for post-herpetic neuralgia, the more successful it was.¹² Winnie et al. reported the overall success rate fell drastically if the initial treatment of sympathetic blockade was delayed beyond two months.³

Winnie described five types of responses to sympathetic blockade. A Type I response indicates a complete and permanent relief following a single sympathetic block. A Type II response indicates that the first treatment did provide pain relief, but the pain gradually returned. With this type of response, usually two or three sympathetic blocks provided permanent relief.

A Type III response is one in which the pain returned after the duration of the local anesthetic. These patients required a series of blocks and had slow, gradual improvement in their pain until they were ultimately pain free. Types I, II, and III responses did become totally pain free in Winnie's study. Type IV patients had sympathetic blockade and their pain returned after the local anesthetic wore off, and incomplete resolution of pain despite subsequent sympathetic blocks and improvement in their overall pain scores.

A Type V response exhibited no improvement with treatment. The likelihood of success is greater when a patient is treated within the first few weeks of onset of acute herpes zoster. If treatment is begun within two months of onset, the chance of preventing post-herpetic neuralgia is 80%.

Non chemical means of neuro-destruction include radio-frequency thermocoagulation. This technique can provide long-term interruption of the sympathetic chain.

With Type I, II, and III responses, no other therapies are indicated. However in Types IV and V responses, oral agents are necessary. Tricyclic antidepressants and anticonvulsants can decrease the burning and sharp shooting component of post-herpetic neuralgia. Amitriptyline in combination with carbamazepine has been extensively studied. Other anticonvulsant and antidepressant combinations have not been proven to be as effective.

Because of possible adverse drug reactions and altered pharmacodynamics and pharmacokinetics in geriatric patients, a team approach is used in prescribing these medications. Frequently a geriatric medicine consultation is indicated. Intravenous lidocaine, as well as oral mexiletine, has been reported to be effective in the management of post-herpetic neuralgia.¹ Intravenous lidocaine, a cell membrane stabilizer, can provide rapid relief of post-herpetic neuralgia.

Physical therapy modalities are important in the management of chronic pain in some geriatric patients. A transcutaneous electrical nerve stimulator may provide benefit in some patients with post-herpetic neuralgia. Aquatic therapy has also been reported to be beneficial in some patients.

Due to the high incidence of depression associated with the severe pain of post-herpetic neuralgia, psychological counseling, relaxation techniques, and cognitive and behavioral therapies may have to be considered on occasion. Consultation with a psychiatrist is mandated in cases of suicidal depression.

If a patient receives an adequate response from a sympathetic block and the pain returns after the duration of the local anesthetic action and

if the pain remains severe, neurolytic injections should be considered. All neurolytic injections are done under radiological guidance to ensure proper placement of local anesthetic or a neuro-destructive agent to target site. Phenol (3%) for stellate ganglion block using CT guidance is used. With respect to the lumbar sympathetic chain, phenol (6%) is used for neurolysis.

Non chemical means of neuro-destruction include radio-frequency thermocoagulation. This technique can provide long-term interruption of the sympathetic chain. It is an outpatient procedure and essentially lacks the complication of chemical neurolysis. CT guidance is preferred over conventional fluoroscopy for neurolytic blocks and radiofrequency lesioning. Cryoanalgesia of the intercostal nerves has been used successfully for thoracic post-herpetic neuralgia.

Occasionally patients with a Type IV or Type V response require implantation of a dorsal column stimulator. This device is implanted percutaneously for the treatment of persistent chronic pain associated with post-herpetic neuralgia. The mechanism of action of this device is still debated. Before implanting a dorsal column stimulator, a trial-stimulator is placed for a few days. A patient must report at least a 50% decrease in pain before a permanent dorsal column stimulator is implanted.

It is best to avoid narcotics in elderly unless they are absolutely indicated, however some patients with severe pain may require opioid therapy. Propoxyphene, codeine, hydrocodone, and oxycodone have all been found to be effective in the management of pain of both acute herpes zoster and post-herpetic neu-

ralgia. Because in many instances, these drugs are combined with acetaminophen or aspirin, their effects on other organ systems must be considered. On occasion, a strong opioid such as morphine may be necessary to control a patient's pain.

The prescribing physician must be aware that patients with decreased renal function may be at a risk for toxicity from the active metabolite of morphine, morphine-6-glucuronide. Unrelieved pain can be associated with high levels of psychosocial distress and attempts at effective analgesia must be done to reverse this outcome and lead a patient to a dramatic improvement in their quality of life.

Little information is known about the effects of long-term opioid treatment prescribed to the patient with chronic nonmalignant pain. We are unaware of any adequate control trials of long-term opioid therapy in the geriatric population. When prescribing a strong opioid, the prescribing physician must take into account the potential risks and benefits and apply appropriate dosing guidelines and monitoring that adequately document outcomes.

Federal and State agencies regulate narcotic prescribing. Ambiguities exist with respect to acceptable medical practice standards for prescribing narcotic medications. The usual "textbook" recommendations for narcotic administrations are usually based on studies of postoperative patients. As a result, these doses are frequently inadequate for severe nonmalignant pain; therefore many patients are under-treated for post-herpetic neuralgia. A multidisciplinary approach between the primary care physician, geriatrician and pain physician is emphasized when prescribing high dose opioid therapy.

Some patients with a Type V response are opioid sensitive with respect to their pain control. If patients have adequate pain relief with systemic opioids with significant dose limiting side effects, one may con-

sider implantation of a subarachnoid opioid drug delivery system. This system allows a small amount of opioid to be deposited into the spinal fluid. The drug released by a subarachnoid delivery system may be increased or decreased by telemetry.

Summary

Post-herpetic neuralgia is associated with significant distress and morbidity. The management of acute neuritis and/or post-herpetic neuralgia can be particularly difficult. A multidisciplinary approach is required. A team consisting of the primary care physician, pain specialist, neurologist, geriatrician, pain psychologist, psychiatrist, and a physiatrist with an integrated approach will provide the best results.

Early interventional therapy with sympathetic nerve blocks may significantly decrease the need for

long-term opioid therapy, as well as long-term use of anticonvulsants, antidepressants, or membrane stabilizers. Early referral to a multidisciplinary pain center may further decrease the behavioral trauma and family disruption associated with this painful condition.

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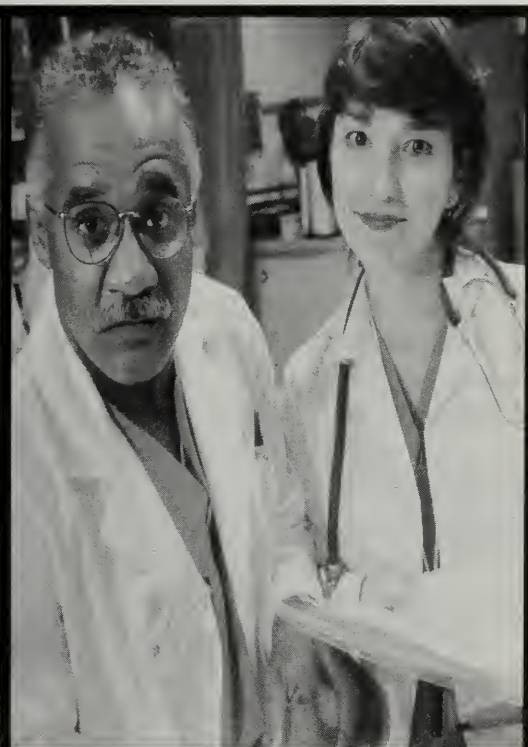
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Childhood Blood Lead Screening in Arkansas: Recommendations for Health Care Providers

Robert West, M.D.*

Abstract

Multiple studies documenting regional differences in prevalence of elevated blood lead levels suggest that children are not at equal risk for lead exposure. In late 1997, the Centers for Disease Control and Prevention (CDC) published guidelines to help states and communities make decisions regarding screening practices. To apply these guidelines to Arkansas Department of Health blood lead data for the 8,883 screens completed in state fiscal year 1997, along with 1990 Census Bureau housing and poverty statistics, were compiled and reviewed. Based upon CDC criteria and other available information, conservative recommendations for blood lead screening are presented for each county in the state.

Lead toxicity in children remains a significant public health concern in certain regions of the country. Between 1991-1994, it was estimated about 930,000 U.S. children one to five years old had lead levels $\geq 10 \mu\text{g}/\text{dL}$.¹ Children most at risk include minorities, those residing in large central cities, and those living in poverty.

Blood lead levels (BLL's) as low as $10 \mu\text{g}/\text{dL}$ have been linked with possible IQ deficits as well as learning and behavior problems.²⁻⁴ To date, no study has demonstrated benefit from reduction of blood lead levels in



Children most at risk include minorities, those residing in large central cities, and those living in poverty.

the $10\text{-}24 \mu\text{g}/\text{dL}$ range. Nonetheless, in 1991 the Centers for Disease Control and Prevention (CDC) published guidelines for screening and follow-up designed to detect lead levels this

low, presumably in order to prevent additional exposure and perhaps shorten the duration of toxicity. These guidelines essentially called for universal screening of one- and two-year

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Results of ADH Lead Screening for the Period 7/1/96-6/30/97

Table 1. Selected County Characteristics and Recommendations for Future Lead Screening.

County	% Screens > 10µ g/dL	% pre-1950 Housing*	%Children in Poverty*	Screening Category**	County	% Screens > 10µ g/dL	% pre-1950 Housing*	%Children in Poverty*	Screening Category**
Arkansas	1.96	24.94	31.6	A	Mississippi	9.51	18.15	37.1	A
Ashley	8.16	17.96	32.6	A	Monroe	12.83	20.70	46.0	C
Baxter	—	7.22	30.9	B	Montgomery	—	18.51	26.2	B
Benton	—	12.81	15.7	B	Nevada	16.66	23.51	29.2	C
Boone	—	18.20	22.7	B	Newton	—	21.31	49.1	B
Bradley	16.88	25.55	44.6	C	Ouachita	6.80	27.14	27.1	A
Calhoun	—	18.51	17.6	B	Perry	—	15.59	27.5	B
Carroll	10.41	23.79	28.3	A	Phillips	12.81	20.25	67.1	C
Chicot	4.00	22.52	63.8	A	Pike	—	22.90	18.5	B
Clark	—	22.94	35.7	B	Poinsett	8.06	18.55	45.8	A
Clay	—	23.36	24.0	B	Polk	—	21.20	25.8	B
Cleburne	6.38	11.50	29.9	A	Pope	2.38	12.06	19.3	A
Cleveland	14.00	20.32	29.1	C	Prairie	—	27.58	31.1	B
Columbia	16.66	23.70	37.1	C	Pulaski	14.07	15.28	21.1	D
Conway	10.00	20.68	24.3	A	Randolph	4.49	18.24	20.9	A
Craighead	—	14.21	24.2	B	Saline	8.33	11.85	11.9	A
Crawford	7.14	15.37	25.7	A	Scott	3.80	22.68	27.5	A
Crittenden	6.38	12.59	40.9	A	Searcy	—	26.48	43.0	B
Cross	4.28	17.73	29.9	A	Sebastian	9.26	23.16	21.3	E
Dallas	—	24.35	29.1	B	Sevier	6.04	20.85	23.9	A
Desha	7.84	21.89	51.9	A	Sharp	—	10.17	34.4	B
Drew	6.98	22.67	44.3	A	St. Francis	8.11	14.62	50.6	A
Faulkner	0.90	11.86	19.8	A	Stone	—	12.77	39.4	B
Franklin	—	23.27	31.3	B	Union	13.82	26.19	33.9	C
Fulton	—	17.44	38.4	B	Van Buren	10.64	14.50	34.3	A
Garland	14.80	19.45	32.0	C	Washington	—	15.62	19.5	B
Grant	—	16.41	17.4	B	White	20.75	14.18	23.3	B
Greene	—	17.50	29.0	B	Woodruff	19.48	21.35	50.1	C
Hempstead	22.99	26.12	35.5	C	Yell	—	19.70	24.4	B
Hot Spring	11.10	19.35	24.7	A					
Howard	9.30	20.07	25.3	A					
Independence	20.3	17.11	22.6	B					
Izard	—	14.44	29.3	B					
Jackson	—	16.53	35.3	B					
Jefferson	14.37	19.00	35.8	D					
Johnson	4.80	22.72	27.5	A					
Lafayette	54.55	27.06	42.6	C					
Lawrence	—	21.13	38.8	B					
Lee	10.20	21.08	73.6	A					
Lincoln	8.20	14.97	38.9	A					
Little River	8.89	13.53	29.6	A					
Logan	10.99	25.94	32.2	A					
Lonoke	—	13.79	20.2	B					
Madison	—	23.95	31.8	B					
Marion	—	11.50	30.9	B					
Miller	8.68	21.55	32.4	A					

*1990 U.S. Census data. Poverty data are for children less than five years of age. **Screening recommendations:

A- Screen all children with positive response to personal risk assessment (PRA); Medicaid should consider dropping the current requirement for routine screening of EPSDT participants in these counties.

(Note: Arkansas Medicaid is subject to federal Health Care Financing Administration regulations.)

B- Screen all Medicaid recipients, and all children with positive response to PRA

C- Universal: screen all one- and two-year-old children

D- Screen all Medicaid recipients, all children with positive response to PRA, and all children residing in following zip codes: 71601, 72202, 72205, 72206, 72114

E- Screen all children with positive response to PRA, and all Medicaid recipients residing in zip codes 72901 and 72904

old children regardless of socioeconomic status or previous population-based results of lead screening in their locale.⁵

Since release of the controversial 1991 guidelines, several reports of lead toxicity prevalence surveys from diverse communities have demonstrated extreme variation in the magnitude of the problem. For example, in 1994 only 0.6% of Alaska Medicaid recipients six years or younger had lead levels $\geq 10 \mu\text{g/dL}$, with the highest being $11 \mu\text{g/dL}$.⁶ A study of children in a California health maintenance organization found only 4% had elevated lead levels.⁷ Additionally, lead levels in U.S. children have fallen dramatically, from a geometric mean of $15 \mu\text{g/dL}$ in 1978 to a geometric mean of $2.7 \mu\text{g/dL}$ in 1994.^{1,8} Studies have also reported low sensitivity and specificity of the five-question risk assessment tool proposed by CDC in 1991.^{7,9} Because of these and other considerations, in 1997 the CDC issued a new set of guidelines, "Screening Young Children for Lead Poisoning."¹⁰

The latest CDC guidelines propose the use of existing blood lead screening data along with housing and demographic data in order to arrive at recommendations for screening at the community level. Where feasible and appropriate, areas as small as individual zip codes are to be studied to determine the best strategy for screening. The guidelines outline two broad categories of screening for a given community: **universal** (all children one and two years old are screened, along with three- to five-year-old children not previously screened or otherwise at

risk), and **targeted** (only children meeting certain criteria are screened, again optimally at one and two years of age). At minimum, all one- and two-year-old children not meeting other criteria for screening should be assessed using a brief questionnaire, and then screened if a positive re-

sponse is obtained.

In brief, the guidelines recommend universal screening in areas having a prevalence of elevated ($\geq 10 \mu\text{g/dL}$) blood lead levels among one- and two-year-old children of $\geq 12\%$. In cases where the prevalence is less than 12%, it is recommended that age of housing be considered. Where the proportion of housing built before 1950 is less than 27%, targeted screening is recommended, while if $\geq 27\%$, either targeted or universal screening may be undertaken. In situations in which blood lead level data are inadequate, screening should be universal in communities with $\geq 27\%$ pre-1950 housing, and targeted in those with $< 27\%$.

Since 1975, the Arkansas Department of Health (ADH) has conducted statewide blood lead screening in local health units. For more than 10 years virtually all screening provided by the Department has been conducted on Medicaid recipients through the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) program. At present, screening is performed routinely at one and two years of age, and at other periodic visits before six years of age on children having positive responses to a risk assessment tool. Screening specimens can be either capillary (fingerstick) or venous blood; most received through the program are capillary. Fingerstick specimens have the advantage of being technically less difficult to perform on young children, but are associated with high rates of false-positive results due to surface contamination problems.

Therefore, all capillary results of $\geq 15 \mu\text{g/dL}$ are confirmed by follow-up venous specimens. Local health units are urged to confirm capillary results in the $10\text{--}14 \mu\text{g/dL}$ range with venous specimens, but this is not



Table 2. Selected Zip Code Housing and Poverty Statistics

	% pre-1950 Housing	% Children 0-4 in Poverty
Pulaski (LR/NLR)		
72202	42.27	50.3
72204	23.06	29.8
72205	27.53	13.0
72206	26.89	41.2
72207	16.42	8.6
72209	3.09	26.8
72210	9.00	7.3
72211	2.34	7.0
72212	2.19	5.7
72103	3.63	4.6
72113	0.32	9.3
72114	35.26	58.2
72116	9.22	4.8
72117	17.63	28.0
72118	11.39	11.6
72120	3.58	0.0
72076	7.10	15.1
72079	6.87	36.0
Sebastian (Fort Smith)		
72901	44.56	28.2
72903	7.40	11.2
72904	31.69	34.4
72905	0.00	—
72916	12.56	7.9
Jefferson (Pine Bluff)		
71601	29.35	55.1
71602	9.00	23.0
71603	16.34	26.0
Washington (Fayetteville)		
72701	23.62	29.3
72703	6.68	12.3

(Source: 1990 U.S. Census).

mandatory since CDC guidelines recommend no specific intervention for this range other than periodic re-screening.

The purpose of this analysis is to review existing state lead screening data, along with relevant housing and poverty data, and attempt to make reasonable recommendations for screening by specific geographic region. Although lead levels of $\geq 10 \mu\text{g}/\text{dL}$ in Arkansas children less than 15 years old were made a reportable condition in 1996, information collected on such individuals from non-public sources has to date been inconsistent and incomplete. Furthermore, reporting of negative results is not required, rendering prevalence estimates impossible. Therefore, only ADH screening data are examined in this review.

Methods

ADH lead screening reports for the period 7/1/96-6/30/97 were extracted for this analysis. Since venous confirmation of capillary results $\geq 15 \mu\text{g}/\text{dL}$ is required, query of the Public Health Laboratories database and review of case files (confirmed levels $\geq 20 \mu\text{g}/\text{dL}$) were utilized to obtain a list of all venous results $\geq 15 \mu\text{g}/\text{dL}$. A separate query was performed to obtain a list of all specimens marked either "screening" or "confirmation" (capillary or venous) having results in the $10\text{--}14 \mu\text{g}/\text{dL}$ range. Results were sorted by county of origin; residential city and zip code data were not available. Lists of results were reviewed manually and duplications stricken so that each child with a positive result was counted only once. In addition, results representing follow-up lead testing on known cases detected in previous years were stricken.

Incidence rather than prevalence was computed due to the fact that screening occurred on an ongoing basis rather than all at once and because children with high levels who were initially detected in a previous year were not actually part of the population "screened" in the year under

study. The denominator for the incidence calculation was the number of specimens marked "screening" received from a given county during the study year. Incidence was only computed for counties in which an adequate number of screens were performed. Based on standard size of sample estimates for a descriptive study of a characteristic in a population sample, this number was determined to be a minimum of 41 screens. At this sample size, the 95% confidence interval for an incidence of elevated BLL's of 12% is 2 - 22%.

Percentages of pre-1950 housing and children 0-4 years old living in poverty were obtained for each county from 1990 U.S. Census data. Zip code data for these same indices were examined only for the largest municipalities in the state: Little Rock, North Little Rock, Fort Smith, Pine Bluff, and Fayetteville. Recommendation categories were then assigned for each county based on BLL, housing, and poverty figures. In a few cases statistics from previous years of ADH lead screening were also factored into category assignments.

Lab Methods. All specimens were analyzed at ADH using graphite furnace atomic absorption spectrophotometry. The ADH laboratory has successfully participated in CDC-sponsored blood lead proficiency testing with this method since 1992.

Results

A statewide total of 8,883 specimens marked "screening" were received during the period reviewed. A total of 1,002 unduplicated results of $\geq 10 \mu\text{g}/\text{dL}$ were counted, yielding a statewide incidence of 11.3%. The vast majority (895) of elevated lead levels were in the $10\text{--}14 \mu\text{g}/\text{dL}$ range; of these, 630 (70.4 %) were fingerstick specimens.

Summaries of relevant data for each county in Arkansas are presented in Table 1. Forty-four (44)

counties produced adequate numbers of screens to report specific elevated-BLL incidence results. Among these, the highest was Lafayette County (54.6%), while the lowest was Faulkner County (0.9%).

As of 1990, the state average for proportion of housing built before 1950 was 17.7%. Only two counties, Ouachita and Prairie, slightly exceeded the CDC recommended cut-off of 27%.

Screening Recommendations

County-level screening recommendations are summarized in Table 1. Counties in which less than 12% of the children screened had lead levels $\geq 10 \mu\text{g}/\text{dL}$ are in general assigned to Recommendation Category A, meaning that only children with positive or unknown responses to the personal risk assessment (PRA; see inset) should be screened in these counties. Since the incidence result is based entirely on screening of Medicaid children, it seems reasonable to infer that the risk to *any* children, whether poor or more economically advantaged, is not particularly high in these counties. Furthermore, the fact that fingerstick data are included in the incidence calculation tends to overstate the true incidence, lending further "safety" to the recommendation.

The only exception to the above generalization is Sebastian County. Relatively high percentages and total numbers of pre-1950 housing and poverty levels exist in two Fort Smith zip codes (72901 and 72904; see Table 2). Thus, in addition to children with positive or "don't know" responses to the risk assessment, all Medicaid recipients in these two zip codes should be routinely screened at ages one and two. For all other zip codes in the county, only children with positive/"don't know" responses to the PRA should be screened.

Personal Risk Assessment Questions (to be administered at ages one and two years, or between the ages of three and five if not previously ad-

ministered):

1. Does your child live in or regularly visit a house that was built before 1950? This question could apply to a facility such as a home day care center or the home of a babysitter or relative.

2. Does your child live in or regularly visit a house built before 1978 with recent or ongoing renovations or remodeling (within the last 6 months)?

3. Does your child have a sibling or playmate who has or did have lead poisoning?

Counties in which blood lead screening data are inadequate are assigned to Category B, meaning all Medicaid recipients and all children with positive or "don't know" responses to the PRA should be screened at ages one and two. This approach allows for additional blood lead data collection in these counties, with possible later assignment to either a lower or higher risk category. Only one county for whom BLL data are inadequate had a percentage of pre-1950 housing that exceeds the CDC cutoff (Prairie, 27.58%). This figure was not deemed high enough to warrant universal screening in that county, particularly since only one case of lead toxicity (≥ 15 $\mu\text{g}/\text{dL}$) out of 90 total screens was detected in that county over five previous years of screening.

Universal screening (Category C) is recommended for 11 of the 15 coun-

ties found to have an incidence of elevated BLL's of $>12\%$. While this strategy may prove to be overly aggressive in some of these counties, it is the safest based on existing data. Two of the 15 counties, Independence and White, are assigned to a lower risk screening category (B). This is because screening in Independence County over the previous five years detected only one confirmed lead level ≥ 15 $\mu\text{g}/\text{dL}$ out of 140 total screens, while only four such levels out of 295 total screens were confirmed from White County. The relatively high percentage of results ≥ 10 $\mu\text{g}/\text{dL}$ reported in these two counties is believed to be due to fingerstick contamination problems.

The two remaining counties with higher incidence of BLL elevation, Pulaski and Jefferson, deserve special consideration. Universal screening in these two counties would result in large numbers of low risk children being screened. Therefore, review of housing and poverty data by zip code from the largest cities in these counties was employed to formulate a more refined recommendation. All children residing in one of the following zip codes should be screened at ages one and two: 72202, 72205, 72206, 72114 (Pulaski), and 71601 (Jefferson). In all other zip codes in these counties, Medicaid recipients and all other children with positive/"don't know" responses to the PRA

should be screened.

In summary, 30 counties are assigned to Category A (lowest risk), 31 counties to Category B (moderate/uncertain risk), and 11 counties to Category C (highest risk). The remaining three counties have specific zip codes incorporated into the screening recommendations.

Discussion

The recommendations presented here vary slightly from the guidance issued by CDC. For example, most of the screening category assignments are made at the county rather than zip code level. In large part this relates to the lack of blood lead level data by zip code. However, in a rural state such as Arkansas, county level designations are probably appropriate in most cases. Examination of larger cities only ($>30,000$ population) by zip code appears reasonable since heterogeneity of risk is more likely in such "urban" settings.

Another variation from the CDC guidelines is that incidence rather than prevalence is used to express rates of elevated BLL's. Incidence refers to new cases of a condition appearing in a given time frame per population unit, while prevalence represents the proportion of a population having the condition at any particular point in time. Since lead screening is an ongoing activity through ADH, rather than a one-time



Table 3. Other Risk Factors Prompting Consideration for Lead Screening:

- Residence with an adult whose job or hobby involves exposure to lead
- Residence near an active lead smelter, battery recycling plant, or other industry likely to release lead into the environment
- Receipt of home remedies (azarcon, greta, pay looah)
- Previous residence outside the United States
- Parents are migrant farm workers
- Pica (ingestion of paint or soil)
- Developmental delay

mass screening effort, at best only a "period prevalence" estimate could be attempted. Such an estimate would be undermined by the fact that lead levels in a given child may fluctuate dramatically over the course of a year, which is the amount of time required to screen sufficient numbers of children in most counties.

An additional problem related to prevalence involves inclusion of children detected in previous years with elevated lead levels. Since the reason they are retested is their known lead toxicity status rather than random or routine screening, they cannot legitimately be included as a subset of the "screened" population in the year under study. For purposes of this review, the calculated figure is therefore referred to as "incidence."

Certain factors may influence the accuracy of the incidence estimate. For example, incorrect labeling of specimen purpose by local health units could tend to inflate the estimate since some children counted with positive "screening" or "confirmatory" results in the year studied may have actually had levels in the 10-19 µg/dL range detected in the preceding year. Specimens collected in the study year from such children should have been labeled as "follow-up," which would have prevented them from being counted as "new" positives.

On the other hand, it is possible that some children might have had two negative, appropriately labeled screens within the same year, thereby increasing the denominator and tending to understate the incidence. However, this problem is likely of minimal importance since routine screening through ADH is prescribed only at 12 and 24 months of age, and data from only one year are used in the analysis. Furthermore, any potential error of this sort is undoubtedly more than offset by the significant problem of false-positive fingerstick results.

For those familiar with the EPSDT program, these recommendations obviously conflict with current Medic-

aid regulations which require, at minimum, screening of all participants at ages one and two. However, the new CDC guidelines recognize that not all such children necessarily require screening: "In general, children who receive Medicaid benefits should be screened unless there are reliable, representative BLL data that demonstrate the absence of lead exposure in this population."¹⁰ It is unreasonable to recommend continued routine screening of Medicaid recipients in the counties assigned to Category A when historical blood lead data have consistently shown little risk to such children in these counties. However, in light of current Health Care Financing Administration requirements, it is incumbent upon the Arkansas Medicaid program to determine feasibility of implementing this targeted approach. Until such change is implemented, individual Medicaid providers in these counties will have to abide by the present EPSDT regulations.

For the counties currently designated Category B, along with Pulaski, Jefferson, and the specific zip codes affected in Sebastian County, questions arise about whether to treat children covered under the new ArKids First expansion the same as "Medicaid recipients" with respect to lead screening. It might be inferred that because income levels for this group are higher than for the traditional Medicaid population, the risk of lead toxicity may in general be lower.

However, Medicaid regulations pertaining to preventive child health services for ArKids First participants suggest that the components of these "well child" visits are identical to EPSDT requirements. Also, the incidence of elevated BLL's among traditional Medicaid enrollees is by definition uncertain in the Category B counties. Therefore, the most conservative recommendation is to consider ArKids First participants the same as traditional Medicaid enrollees with

regard to lead screening.

In conclusion, the recommendations presented here provide a rational framework for lead screening decisions by Arkansas medical providers. As such, they should be viewed as minimum standards that still allow some flexibility on the part of caregivers. Physicians should feel free to obtain lead screens when risk factors other than the criteria outlined (Table 3) are present, and such screens should be reimbursed by Medicaid and other third party payors. Finally, involved parties should anticipate future revisions in the recommendations as additional blood lead data are gathered and as childhood lead toxicity progressively diminishes in importance.

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Apparent Complication of Common Procedure

J. Kelley Avery, M.D.*

Case Report

A 26-year-old woman with insulin-dependent diabetes first diagnosed at 14 months of age had a previous caesarean section for failure to progress. About 10 days before her expected due date, she was admitted for a planned elective C-section. She was an early morning admission to a medical center hospital where, after having the risks and benefits of a continuous epidural anesthetic explained to her, consented to and requested this type of anesthesia for her surgery and for the control of postoperative pain. At 7 AM, the anesthesiologist made his evaluation, and no positive findings were recorded in his very brief note on the chart.

The continuous epidural anesthetic started with administration of a loading dose of 15 cc of Nesacaine and 2 cc of Fentanyl 1:200,000. The note by the anesthesiologist described the procedure as, "Technically difficult secondary to obesity and presacral edema." The surgery was accomplished uneventfully with the delivery of a healthy baby.

During the surgery she received two injections of 3% Nesacaine 1:200,000, one at 8:20 AM and the second at 8:55 AM. After the first of these injections the note read, "C/o leg pain." A PCA pump (patient controlled analgesia) was put in place at the time of the 8:20 AM injection. Epinephrine was thought to have been added to the analgesic mixture

at this time but that was not documented in the record.

The progress notes in the recovery room record were very sparse and incomplete. At 4:15 PM, six to seven hours after the surgery, the note reads "T-98.2. Awake, alert, and oriented." At 8:02 PM, ten hours after the surgery, the note reads, "States feet still feel heavy and tingly." No doctor was called with these complaints. At 11:50 PM, the anesthesiologist on call (not the anesthesiologist of record) was contacted by phone and told that the patient was unable to pick up her legs. He was given the block level, which was not documented in the record, and told that the patient complained of pain in the back with each boost of the continuous epidural. The narcotic epidural was turned off as ordered by phone. The anesthesiologist was at the bedside about an hour later. His note reads, "Still c/o weakness of legs; Narcotic infusion stopped approximately one hour ago. Also c/o back pain when boluses are administered. Will remove catheter in morning and check her situation."

At 7 AM, the anesthesiologist on call (the third one) removed the epidural catheter. His note stated that the infusion contained only Fentanyl and Astramorph (morphine sulphate). His note again describes the fact that the patient had pain with the injection of the solution (from pump) and indicates that this was the reason that the infusion was stopped at 11:10 PM. Throughout this day the patient continued to complain of extremity pain and inability to lift the legs.

Neurologic evaluation, including contrast MRI of the spine, was done. The initial thought was that the patient suffered an L4-5 neuropathy "possibly secondary to the epidural anesthesia." Epidural hematoma or cauda equina syndrome were mentioned in the notes as possibilities. Careful review of the MRI showed no evidence of hematoma.

During the month in the hospital, the patient was evaluated and re-evaluated by multiple consultants. The prevailing opinion was that, despite the negative MRI, epidural hematoma was a possibility. With aggressive physical therapy some improvement occurred. Her extremity pain improved, and at the time of discharge was not present. The weakness in her legs improved some but she did not become able to walk unassisted. On returning home, she found it possible to care for her baby from a wheelchair. Two years after the incident, the patient continued to improve slowly but remained unable to walk unassisted and spent the majority of her time in a wheelchair.

A lawsuit was filed charging the defendant physicians with lack of informed consent, deviation from the standard of care in the technique employed in the epidural anesthetic, delay in the timely diagnosis of the neurologic problem, and (against the hospital) failure to monitor the patient adequately in the postoperative period. All defendants were dismissed except the anesthesiologist who started the epidural infusion and the anesthesiologist on call who did not aggressively respond to the

* Dr. Avery, is a member of the Loss Prevention Committee, State Volunteer Mutual Insurance Company, Brentwood. This article appeared in the *Journal of the Tennessee Medical Association* in April 1998. It is reprinted here with permission.

patient's neurologic complaints. The hospital was also kept in the lawsuit on the charge of failure to adequately monitor the patient.

Loss Prevention Comments

We do not know precisely what caused this patient's paraparesis. The working diagnosis was cauda equina syndrome, possibly due to an epidural hematoma, even though the MRI was normal. Regardless of the anatomic diagnosis, this patient suffered a devastating complication from a very common procedure. While there were notable deficiencies in the medical record, we would be hard pressed to find that there was a deviation from the accepted standard of care of this patient.

This case, like so many others, was not winnable on the record according to experts who rendered opinions. The patient was not monitored appropriately in the postoperative period. The complaints of pain in the back on the injection of a bolus from the PCA, and the weakness in the legs long after she should have recovered, were known to the nurses but were not made known to the physicians for at least four to five hours. This alone was enough to keep the hospital in this case.

This patient had been an insulin-dependent diabetic since early childhood, and as such was a high-risk patient by definition. The choice of anesthetic was not criticized, but the persistence in completing, a "difficult procedure" in this patient who was obese and who had presacral edema was questionable. It is known that accidents do very rarely occur with epidural anesthesia, resulting in neurologic deficits. Should this patient have had a more thorough informed consent discussion? The documented evidence of informed consent was weak, and was severely criticized by the experts. Did the patient know that there was a chance, however slight, of a neurologic deficit

as a result of the method of anesthesia? The use of epinephrine as a part of the analgesic material was also thought to be a mistake, in that it adds little to the effectiveness of the procedure and also can contribute to reduced arterial flow to the cord by the vasospasm that is known to occur. In a diabetic patient there is a predisposition to small artery disease and the addition of the epinephrine could be questioned on those grounds.

Would it have made any difference if the anesthesiologist on call had promptly come to the hospital, thoroughly evaluated the patient, and removed the epidural catheter at that time? Probably not, but the timely response and action of the physician responsible for the patient is expected by patients, and family, and when that does not happen, it can result in anger and resentment. On many occasions this kind of failure to respond has been interpreted as a lack of the expected caring and attention and has led to legal action. Did it here? We do not know.

Most experts believed that the most likely diagnosis in this case is anterior spinal artery syndrome. With that in mind, it is easy to postulate retrospectively that the vasospasm produced by the agents used in the epidural was sufficient to contribute to the thrombosis of this small vessel. It is unlikely that earlier diagnosis of this syndrome would have made effective intervention possible.

We still do not know what caused this patient's neurologic problems. We do not know that what was done by the physicians involved had anything at all to do with the outcome. We do know that the record, in the opinion of several experts, both legal and medical, offered unacceptable challenges for their defense. A settlement was negotiated, with the hospital also contributing.

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State Health Watch

Information provided by the Arkansas Department of Health, Division of Epidemiology

'Talking the Talk, Walking the Walk in Memphis'

A Multi-State Cardiovascular Health Conference

The Arkansas Department of Health has joined with six other states, Alabama, Florida, Mississippi, Missouri, Tennessee and Virginia to sponsor a regional cardiovascular conference. The National Heart, Lung and Blood Institute is a major sponsor of the conference, which provides participants with the latest information on the detection, prevention and treatment of cardiovascular and associated diseases.

Cardiovascular disease (CUD) accounts for more than half of all deaths in the United States. Modifiable risk factors for CUD include high blood pressure, elevated blood cholesterol, tobacco use, insufficient physical activity, poor nutrition and environmental tobacco smoke.

The regional cardiovascular conference is scheduled for Sept. 13-15, 1999, at the Adam's Mark Hotel in Memphis, Tennessee. The theme of the conference is "Talking the Talk, Walking the Walk in Memphis," A Multi-State Cardiovascular Health Conference. Topic areas will include epidemiology of CUD in the Southeastern States, rising issues in research and prevention of

CUD and the future of CUD treatment.

If you are interested in receiving more information and/or at-

tending this conference, please call Lisa Weaver at the Arkansas Department of Health, (501) 661-2504, to request a registration form.

Reported Cases of Selected Diseases in Arkansas Profile for February 1999

The three month delay in the disease profile for a given month is designed to minimize any changes that may occur due to the effects of late reporting. The numbers in the table below reflect the actual disease onset date, if known, rather than the date the disease was reported.

Disease Name	Total Reported Cases YTD 1999	Total Reported Cases YTD 1998	Total Reported Cases YTD 1997	Total Reported Cases 1998*	Total Reported Cases 1997
Campylobacteriosis	14	15	26	178	175
Giardiasis	32	17	28	168	220
Salmonellosis	47	26	23	616	445
Shigellosis	29	20	23	211	273
Hepatitis A	5	6	46	84	223
Hepatitis B	8	22	18	112	106
Hepatitis C	1	1	2	10	5
Meningococcal Infections	8	7	12	31	38
Viral/Aseptic Meningitis	5	3	5	77	26
Ehrlichiosis	1	0	0	13	22
Lyme Disease	0	1	3	8	27
Rocky Mtn Spotted Fever	0	3	0	24	31
Tularemia	0	0	0	26	24
Measles	0	0	0	0	0
Mumps	0	0	0	13	3
Pertussis	4	5	2	93	60
Tuberculosis	8	6	20	170	200

1998 data are provisional as of 4/9/99.

For a complete list of reportable diseases in Arkansas, call the Arkansas Department of Health, Division of Epidemiology, at (501) 661-2893 during normal business hours.



Physical Finding: Pulsus Alternans

Pulsus alternans is defined as the regular alteration of the pulse pressure detected in a peripheral artery where the systolic pressure varies greater than 20 mmHg. The pulse must be regular. In this issue of CCU: Cardiology Commentary and Update, I review the significance of this physical finding.

Patient Presentation

History: A 72 year-old male presented to the hospital with chest discomfort and shortness of air (see complete problem list, Table 1). He seldom sought medical attention and had no cardiac history. He was not taking any medication.

Physical and Laboratory Examination: The pulse was 90 beats/minute and was regular and the blood pressure was 122/78 mmHg in the right arm. A similar reading was obtained from the left arm. The peripheral pulses were normal. Examination of the neck veins and lung fields were also normal. The apical impulse was slightly lateral displaced. Most noticeably was a low amplitude "growling" nearly holosystolic murmur heard at the base of the heart. The second heart sound was barely audible and distinct splitting of this sound could not be absolutely de-

Table 1:
Complete Problem List

1. Valvular Heart Disease

Etiology →	Degeneration, calcification
Anatomy →	A. Cardiac catheterization: normal coronary arteries, calcified aortic valve B. Aortic valve replacement
Physiology →	A. Presentation with chest discomfort B. Pulsus alternans C. Cardiac catheterization: aortic valve area 0.5 cm ²
Objective →	Severely compromised at presentation
Subjective →	Currently asymptomatic

termined. The electrocardiogram was consistent with left ventricular hypertrophy. There was no electrocardiographic or enzymatic evidence of myocardial necrosis.

Hospital course: At the time of cardiac catheterization, pulsus alternans was detected in the central aortic pressure tracing (Figure 1). The aortic valve was severely calcified and the calculated aortic valve area was 0.5 cm². He tolerated aortic valve replacement well and has resumed normal activities. He has a 13 stroke golf handicap.

Discussion

Pulsus alternans was initially described by Traube in 1872 and is now recognized as a sign of left

ventricular decompensation.¹ In patients with severe aortic stenosis, the presence of pulsus alternans is a grave sign, mandating immediate attention. White noted a 35% mortality rate in 8 months in 72 patients with pulsus alternans and aortic stenosis.² Occasionally, pulsus alternans is not due to aortic stenosis but rather a sign of severe left ventricular dysfunction from another etiologies. It may be seen in normal patients in the first few beats following a brief "run" of supraventricular tachycardia or after a premature ventricular beat.

Pulsus alternans may be detected with palpation of a peripheral artery or with measure of the

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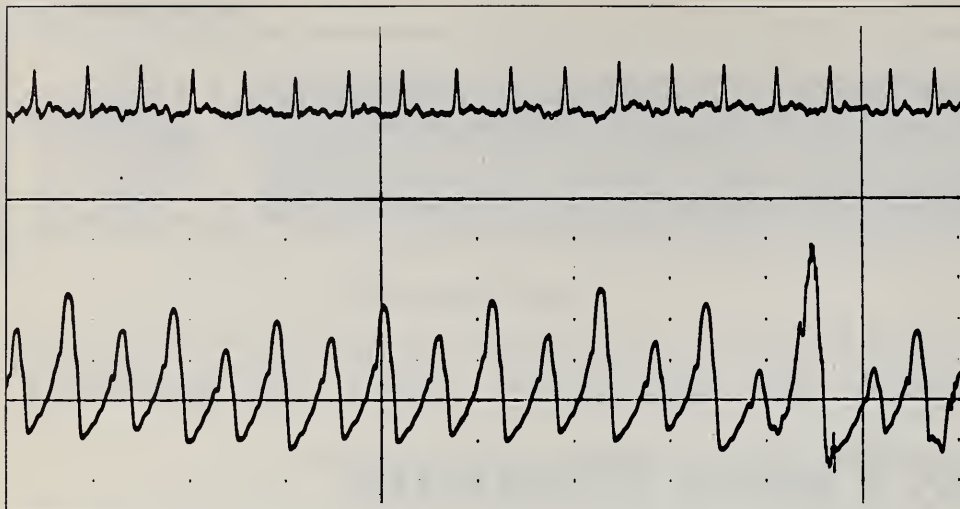


Figure Legend: 1. Pressure recording from the ascending aorta showing pulsus alternans. It is critical to note the regular rhythm. (Scale: 10 seconds between vertical lines, 100 mmHg between horizontal lines)

blood pressure with a sphygmomanometry. With severe pulsus alternans, there may be pulse deficit because the "low" beat may not be palpated or heard at all. There may also be alternation of the in-

tensity of the Korotkoff or heart sounds. A third heart sound may be present.

It is now understood that pulsus alternans is an abnormality of systolic performance of the left ventricle

and not due to a change in left ventricular relaxation or diastolic function (preload).^{3,4} The change in the contractile force of the myocardium is due to localized electrical-mechanical dissociation from a defect in the calcium binding systems responsible for excitation — contraction coupling.

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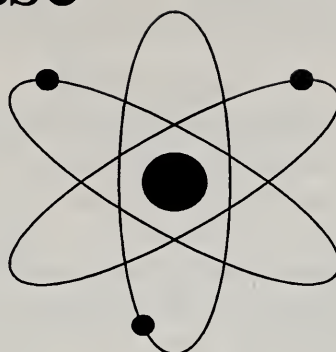
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Radiological Case of the Month



Editor and Author: *Steven R. Nokes, M.D.*

Authors:

Steven R. Nokes, M.D., Scott Young, M.D.

David Barnett, M.D.

W. Bradley Pierce, M.D.

History:

A 66-year-old male with a long history of renal dialysis now with a transplant kidney presented with right hip pain. Plain films (Figures 1a and 1b) and an MR scan (Figures 2a and 2b) were obtained.

Diagnosis:

Dialysis related amyloid arthropathy.

Findings:

The plain films reveal subtle erosion of the femoral neck. The joint space is intact. MR demonstrates bilateral soft tissue masses surrounding the femoral necks, right greater than left. Marked erosion of the right femoral neck is present with an impending pathologic fracture, accounting for the

patient's right hip pain. The periarthritic soft tissue deposits have relatively dark signal on all pulse sequences.

Discussion:

Dialysis related arthropathy is an increasingly common complication of long term hemodialysis unrelated to renal osteodystrophy or crystal deposition. It seldom occurs prior to five years of dialysis, but occurs in 30% to 50% of patients treated longer than fifteen years. The roentgen manifestations are secondary to peculiar synovial accumulation of a unique form of amyloid composed of beta-2-microglobulin (AB_2M). The high serum levels result from failure of the tubules to metabolize AB_2M and inability of cuprophane dialysis membranes to filter it. More permeable membranes have been developed



Figure 1. (a) AP radiograph of the right hip



Figure 1.(b) lateral radiograph of the right hip

to attempt to correct this problem.

Amyloid arthropathy is typically a bilateral, progressive polyarthropathy. The shoulders, hips, wrists and knees are most commonly affected. The "shoulder pad" sign is an early manifestation of the disease resulting from soft tissue amyloid deposition and thoracic muscular atrophy. There is no correlation between serum levels of amyloid and the extent of joint disease. A serious complication of amyloid arthropathy of the hip is pathologic fracture. The femoral neck is particularly at risk as it is a "bare area" of the joint uncovered by cartilage. In one series of dialysis patients, 8 of 12 with hip involvement presented with a spontaneous fracture. Our patient required a right hip replacement.

Plain films may reveal soft tissue swelling with apparent intraosseous erosions or cysts. The joint space is spared. The synovial amyloid has a characteristic MR appearance with long T_1 and short T_2 relaxation times (intermediate signal between muscle and fibrocartilage on all pulse sequences). This is unusual and probably a result of the AB_2M pleated sheet architecture restricting mobile water and collagen diamagnetic susceptibility. Inflammatory masses, acute or chronic synovitis and brown tumors of hyperparathyroidism are easily distinguished by bright signal on T_2 weighting. Pigmented villonodular synovitis (PVNS) is the major differential consideration, as it causes a hypertrophic synovitis with low signal intensity on all pulse sequences based on the presence of ferromagnetic hemosiderin (5 unpaired electrons). The synovium of PVNS is even darker than amyloid arthropathy and is almost always monoarticular.

References:

Cobby MJ, Adler RS, Swartz R, Martel W. Dialysis-related amyloid arthropathy: MR imaging in four patients. *AJR* 1991;157:1023-1027.

Goldman AB, Bansal M. Amyloidosis and Silicone Synovitis. *Radiol Clin of North AM* 1996;34:375-394.

Ross LV, Ross GJ, Mesgarzadeh M., et al. Hemodialysis-related amyloidosis of bone. *Radiology* 1991;178:263-265.

Editor and Authors:

Editor and author: Seven R. Nokes, M.D. associated with Radiology Consultants in Little Rock.

Author: Scott Young, M.D. associated with Baptist Transplant Services in Little Rock.

Author: David Barnett, M.D. associated with Ortho Arkansas in Little Rock.

Author: W. Bradley Pierce, M.D. associated with Radiology Consultants in Little Rock.

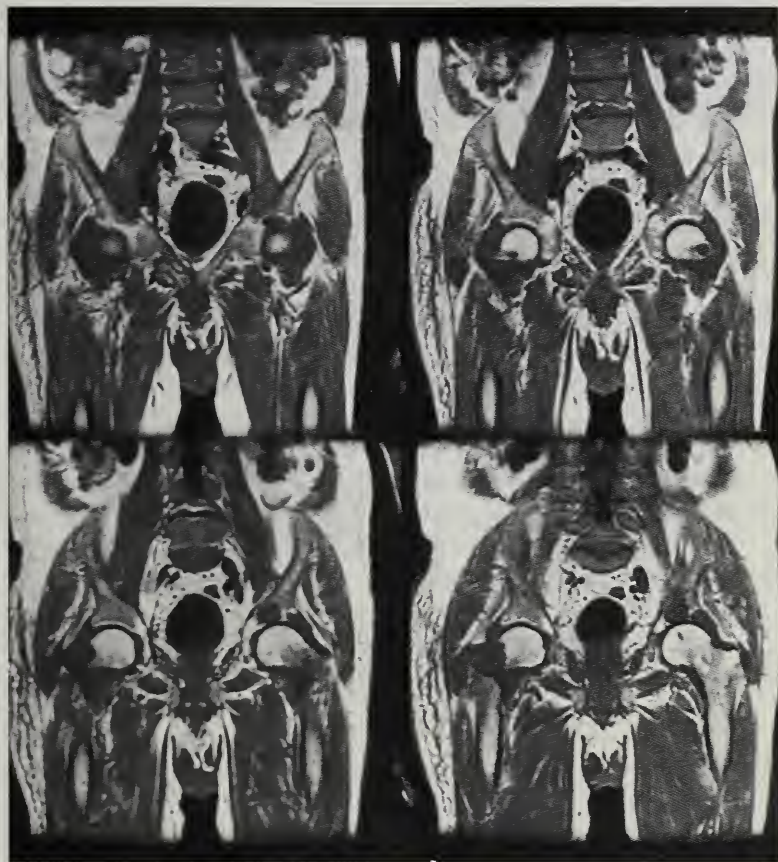


Figure 2. (a) Coronal T_1 (500/11) weighted images of the hips

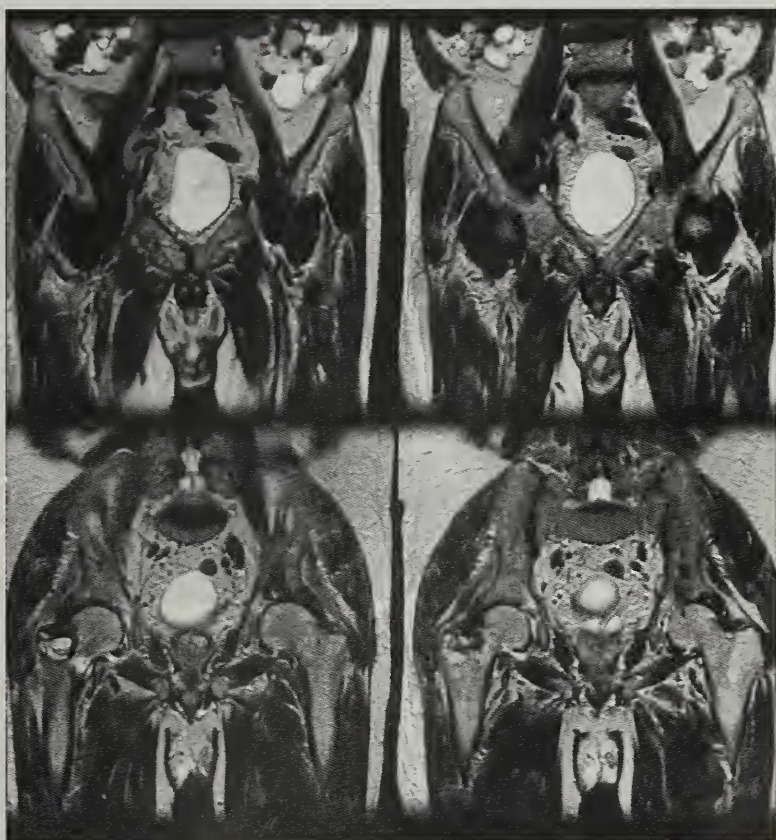


Figure 2. (b) FSE T_2 (5000/103ef) weighted images of the hips

Resolutions

Ronald J. Bracken, M.D.

Whereas, members of the Garland County Medical Society mourn the recent death of one of its members, Ronald J. Bracken, M.D.; and

Whereas, Dr. Bracken was a valued member of his community and a well respected member of his profession; and

Whereas, Dr. Bracken demonstrated his loyalty to his profession through his many years of service to his patients; and

Whereas, Dr. Bracken served in various positions of leadership in organized medicine and as a Councilor to the Arkansas Medical Society.

Be it therefore resolved: That, this resolution be placed in the archives of the Arkansas Medical Society; and

That, a copy be published in *The Journal of the Arkansas Medical Society*.

Richard "Sonny" Martin, M.D.

Whereas, the members of the

Greene/Clay County Medical Society are saddened by the death of one of its members, Richard "Sonny" Martin, M.D.; and

Whereas, Dr. Martin served in numerous positions of leadership in organized medicine and as chief of staff of the Arkansas Methodist Hospital; and

Whereas, Dr. Martin demonstrating his loyalty to his patients, his community, and his country as a United States Marine; and

Whereas, Dr. Martin was named the Civitan Citizen of the Year in 1998.

Be it therefore resolved: That, this resolution be placed in the archives of the Arkansas Medical Society; and

That, a copy be published in *The Journal of the Arkansas Medical Society*.

Troy F. Barnett Jr., M.D.

Whereas, the members of the Pulaski County Medical Society are sin-

cerely saddened by the recent death of an esteemed colleague; Troy F. Barnett Jr., M.D.; and

Whereas, he was a loyal member of this Society for 22 years; and

Whereas, Dr. Barnett's patriotism was evidenced by many years of service in the Arkansas Air National Guard, from which he retired in 1998 after achieving the rank of Colonel; and

Whereas, the integrity, competence and compassion he displayed in the practice of medicine and in every aspect of his life will linger as a source of inspiration to all who knew him;

Be it therefore resolved:

That, this resolution be adopted and placed in the permanent files of the Society; and

That, a copy be sent to Dr. Barnett's family as an expression of our heartfelt sorrow; and

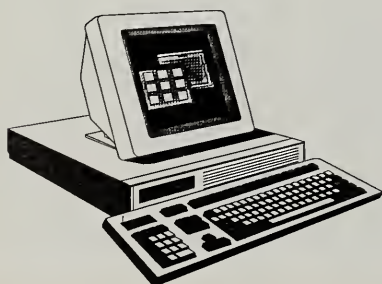
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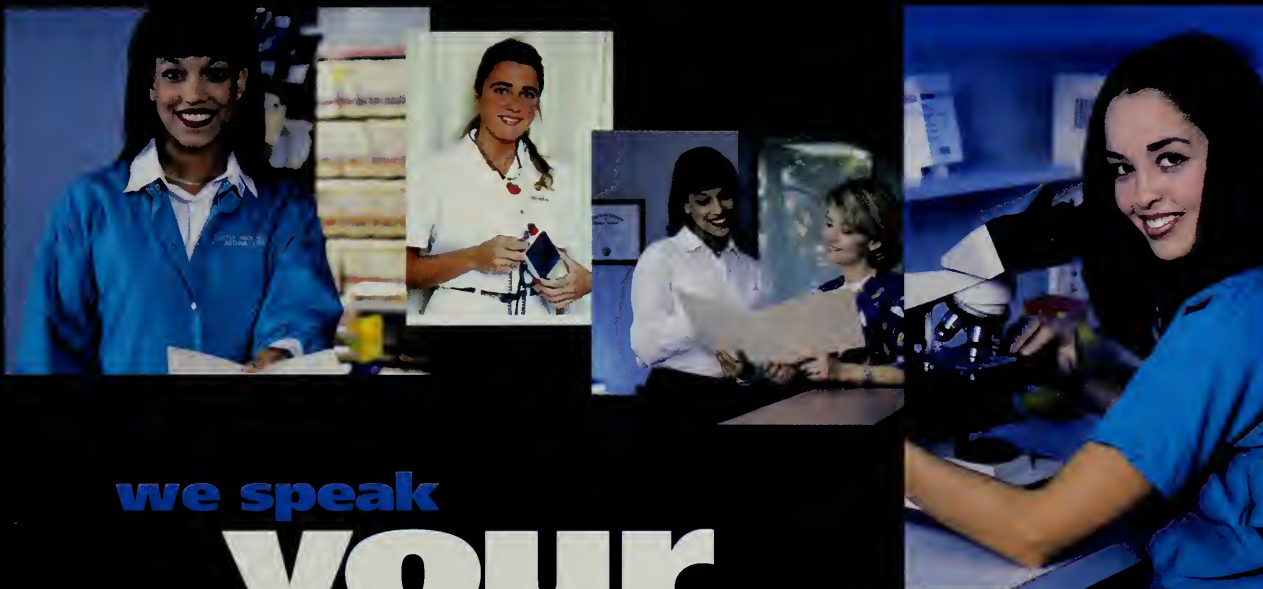
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